

# STN Columbus

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
 NEWS 2 "Ask CAS" for self-help around the clock  
 NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks  
 (ROSPATENT) added to list of core patent offices covered  
 NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status  
 data from INPADOC  
 NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available  
 NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded  
 NEWS 7 MAR 02 GBFULL: New full-text patent database on STN  
 NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced  
 NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
 NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced  
 NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY  
 NEWS 12 MAR 22 PATDPASPC - New patent database available  
 NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags  
 NEWS 14 APR 04 EPFULL enhanced with additional patent information and new  
 fields  
 NEWS 15 APR 04 EMBASE - Database reloaded and enhanced  
  
 NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
 MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
 AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
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FILE 'HOME' ENTERED AT 07:56:30 ON 14 APR 2005

=> fil ca; act a658811a1/a

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	ENTRY	SESSION
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FILE 'CA' ENTERED AT 07:57:34 ON 14 APR 2005

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FILE COVERS 1907 - 7 Apr 2005 VOL 142 ISS 16  
FILE LAST UPDATED: 7 Apr 2005 (20050407/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1 (      315)SEA FILE=REGISTRY ("ISOPROPYL METHACRYLATE"/CRN OR "ISOPROPYL 2
L2 (      6017)SEA FILE=REGISTRY ("ACRYESTER L"/CRN OR "AGEFLEX FM 246"/CRN OR
L3 (      4230)SEA FILE=REGISTRY ("ACRYESTER S"/CRN OR "BLEMME SMA"/CRN OR "L
L4 (      519)SEA FILE=REGISTRY ("ENT 8767"/CRN OR "N-OCTYL METHACRYLATE"/CRN
L5 (      103)SEA FILE=REGISTRY ("AMYL METHACRYLATE"/CRN OR "N-AMYL METHACRYL
L6 (      660)SEA FILE=REGISTRY ("N-PROPYL METHACRYLATE"/CRN OR "NSC 32624"/C
L7 (      474)SEA FILE=REGISTRY ("MYRISTYL METHACRYLATE"/CRN OR "TETRADECYL M
L8 (      890)SEA FILE=REGISTRY (METHOXYETHENE/CRN OR METHOXYETHYLENE/CRN OR
L9 (      2491)SEA FILE=REGISTRY (ETHOXYETHENE/CRN OR ETHOXYETHYLENE/CRN OR "E
L10 (      848)SEA FILE=REGISTRY (BUTOXYETHENE/CRN OR BUTOXYETHYLENE/CRN OR "B
L11 (      97008)SEA FILE=REGISTRY 80-62-6/CRN OR 97-63-2/CRN OR L1 OR 88-12-0/C
L12 (      92191)SEA FILE=REGISTRY 141-32-2/CRN OR 97-88-1/CRN OR L2 OR 106-91-2
L13 (      94944)SEA FILE=REGISTRY 79-41-4/CRN OR 79-10-7/CRN OR 140-10-3/CRN OR
L14 (      17116)SEA FILE=REGISTRY L13 AND L11 AND L12 AND PMS/CI
L15 (      14247)SEA FILE=CA L14
L16          80 SEA FILE=CA L15 (P) (BINDER OR RESIN) AND TONER
```

=> act a658811/a

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L17 (      315)SEA FILE=REGISTRY ("ISOPROPYL METHACRYLATE"/CRN OR "ISOPROPYL 2
L18 (      6017)SEA FILE=REGISTRY ("ACRYESTER L"/CRN OR "AGEFLEX FM 246"/CRN OR
L19 (      4230)SEA FILE=REGISTRY ("ACRYESTER S"/CRN OR "BLEMME SMA"/CRN OR "L
L20 (      519)SEA FILE=REGISTRY ("ENT 8767"/CRN OR "N-OCTYL METHACRYLATE"/CRN
L21 (      103)SEA FILE=REGISTRY ("AMYL METHACRYLATE"/CRN OR "N-AMYL METHACRYL
L22 (      660)SEA FILE=REGISTRY ("N-PROPYL METHACRYLATE"/CRN OR "NSC 32624"/C
L23 (      474)SEA FILE=REGISTRY ("MYRISTYL METHACRYLATE"/CRN OR "TETRADECYL M
L24 (      890)SEA FILE=REGISTRY (METHOXYETHENE/CRN OR METHOXYETHYLENE/CRN OR
L25 (      2491)SEA FILE=REGISTRY (ETHOXYETHENE/CRN OR ETHOXYETHYLENE/CRN OR "E
L26 (      848)SEA FILE=REGISTRY (BUTOXYETHENE/CRN OR BUTOXYETHYLENE/CRN OR "B
L27 (      97008)SEA FILE=REGISTRY 80-62-6/CRN OR 97-63-2/CRN OR L17 OR 88-12-0/
L28 (      92191)SEA FILE=REGISTRY 141-32-2/CRN OR 97-88-1/CRN OR L18 OR 106-91-
L29 (      94944)SEA FILE=REGISTRY 79-41-4/CRN OR 79-10-7/CRN OR 140-10-3/CRN OR
L30 (      17116)SEA FILE=REGISTRY L29 AND L27 AND L28 AND PMS/CI
L31          14247 SEA FILE=CA L30
```

=> s l31 and (glycidyl or epoxy or oxirane)

```
40595 GLYCIDYL
214571 EPOXY
17555 OXIRANE
```

L32 3617 L31 AND (GLYCIDYL OR EPOXY OR OXIRANE)

=> s l32 and toner

```
29950 TONER
```

L33 84 L32 AND TONER

=> s l33 not (liquid (2w) (toner# or develop?))

```
630916 LIQUID
31322 TONER#
2022478 DEVELOP?
```

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2655 LIQUID (2W) (TONER# OR DEVELOP?)  
L34 48 L33 NOT (LIQUID (2W) (TONER# OR DEVELOP?))

=> s l34 and electrophotog?

63903 ELECTROPHOTOG?

L35 44 L34 AND ELECTROPHOTOG?

=> d fbib kwic 30-44; fil stnguide

L35 ANSWER 30 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

AN 120:334854 CA

TI **Electrophotographic** color transfer imaging method

IN Kato, Eiichi; Oosawa, Sadao

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 63 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05181324	A2	19930723	JP 1991-358228	19911227
	JP 3180967	B2	20010703		
	DE 4294542	T	19941201	DE 1992-4294542	19921225
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225
	US 6004716	A	19991221	US 1994-256185	19940627
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225

## PATENT FAMILY INFORMATION:

FAN 121:121637

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05181325	A2	19930723	JP 1991-358232	19911227
	DE 4294542	T	19941201	DE 1992-4294542	19921225
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225
	US 6004716	A	19991221	US 1994-256185	19940627
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225

TI **Electrophotographic** color transfer imaging method

AB In an **electrophotog.** transfer imaging method utilizing an **electrophotog.** photoreceptor, a means for **electrophotog.** producing a color **toner** image on a transfer layer present on the **electrophotog.** photoreceptor, and a means for thermally transferring the **toner** image -bearing transfer layer to a receptor sheet, the photoreceptor has a surface layer based on either a polymer component contg. Si and(or) F or amorphous Si, and the above transferable layer is obtained by electrocoating the photoreceptor surface with particles of a thermoplastic resin to effect film formation. Since the **toner** image transfer is effected following wet development by transferring the **toner** image intact with the transfer layer, precise high quality images can be obtained free of color slippage.

ST **electrophotog** color transfer imaging; photoreceptor **electrophotog** surface layer

IT **Electrophotographic** photoconductors and photoreceptors  
(for transferable **toner** image formation)

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IT **Electrophotography**, color  
(transfer, peelable transfer film using)

IT 9011-14-7D, Methyl methacrylate homopolymer, copolymer with dimethylsiloxane macromonomer  
RL: USES (Uses)  
(**electrophotog.** photoreceptor surface layer contg.)

IT 79-41-4DP, fluoroalkyl ester, block copolymer with Et and **glycidyl** methacrylates 97-63-2DP, Ethyl methacrylate, block copolymer with **glycidyl** and fluoroalkyl methacrylates 106-91-2DP, block copolymer with Et and fluoroalkyl methacrylates 26936-24-3DP, Methacrylic acidmethyl acrylatemethyl methacrylate copolymer, methylsiloxy-terminated 144541-84-4P 150624-67-2P 150625-19-7P 150642-22-1P 155292-83-4P 155292-84-5P 155292-85-6P 155292-86-7P 155292-87-8P 155292-88-9P 155292-90-3P 155292-91-4P 155292-92-5P 155292-93-6P 155292-94-7P 155293-26-8P  
RL: PREP (Preparation)  
(prepn. of, surface layer for **electrophotog.** photoreceptor contg.)

IT 144541-84-4P 150625-01-7P 150625-03-9P 150625-22-2P 150642-24-3P 155292-96-9P 155292-98-1P  
RL: PREP (Preparation)  
(prepn. of, surface layer material for **electrophotog.** photoreceptor)

IT 155292-99-2 155293-00-8 155293-01-9 155293-02-0 155293-03-1 155293-05-3 155293-06-4 155293-07-5 155293-08-6 155293-10-0 155293-11-1 155293-13-3 155293-15-5 155293-16-6 155293-18-8 155293-19-9 155293-20-2 155293-22-4 155293-23-5 155293-24-6 155293-27-9 155330-29-3  
RL: USES (Uses)  
(resin particles, **electrophotog.** photoreceptor surface layer contg.)

IT 150624-89-8  
RL: USES (Uses)  
(star, dithiocarbamate-initiated, **electrophotog.** photoreceptor surface layer contg.)

IT 9004-48-2 9015-12-7, Cellidor Bsp 25068-26-2, 4-Methylpentene homopolymer 27043-73-8, Poly(decamethylene terephthalate) 27055-32-9, Poly(decamethylene terephthalate) 59199-92-7, Poly(decamethylene isophthalate) 66837-11-4, Poly(pentamethylene carbonate)  
RL: USES (Uses)  
(thermoplastic resin, **electrophotog.** photoreceptor surface layer from)

L35 ANSWER 31 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 118:180089 CA  
TI Blanks for **electrophotographic** platemaking  
IN Kato, Eiichi; Osawa, Sadao  
PA Fuji Photo Film Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 35 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 04204739	A2	19920727	JP 1990-336806	19901130
				JP 1990-336806	19901130

TI Blanks for **electrophotographic** platemaking  
AB In the title blank for **electrophotog.** platemaking comprising an elec. conductive support coated with a photoconductive layer composed of a photoconductor and a binder resin and used to prep. a printing plate by

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developing an **electrophotog. toner** image and removing the photoconductor layer from the nonimage-bearing regions, the above binder is a graft copolymer (wt. av. mol. wt.  $1 \times 10^3$ – $1 \times 10^5$ ). The above graft copolymer is obtained from a monofunctional macromonomer (wt. av. mol. wt.  $\leq 2 \times 10^4$ ) having at 1 end only of the polymer chain the structural component  $\text{CHa1:Ca2A}^\circ$  [ $\text{A}^\circ = \text{CO}_2, \text{OCO}, \text{CH}_2\text{O}, \text{CO}, \text{CH}_2\text{CO}_2, \text{O}, \text{SO}_2, \text{CO}, \text{CONHCO}, \text{CONHCONH}, \text{CONHCONH}, \text{etc.}; \text{a1}, \text{a2} = \text{H}, \text{halo}, \text{CN}, \text{hydrocarbon moiety}, \text{CO}_2\text{D1}, \text{hydrocarbon interposed CO}_2\text{D1 (D1} = \text{H, hydrocarbon moiety)}]$  and contg.  $\text{CHb1Cb2(A1-B}^\circ)$  or  $\text{CHb1Cb2B1 [A1} = \text{same as A}^\circ \text{ above; B}^\circ = \text{C1-18 aliph. or C6-12 arom.; b1, b2} = \text{same as a1, a2 above; B1} = \text{CN, CONH}_2, \text{substituted phenyl}], \text{ and } \geq 1 \text{ acid group selected from acid anhydride-contg. groups as members of the main polymer chain. The above macromonomer is allowed to react with CHc1:ML2(A2-B2) [A2 = same as A1 above; B2 = same as B}^\circ \text{ above; c1, c2} = \text{same as a1, a2 above}] \text{ and a monofunctional monomer contg. PO}_3\text{H}_2, \text{SO}_3\text{H, CO}_2\text{H, phenolic OH, P(O)(OH)R}^\circ \text{ (R}^\circ = \text{hydrocarbon or oxyhydrocarbon), or cyclic acid anhydride to obtain the above graft copolymer binder resin. The blank shows superior optical response and gives printing plates with good printing characteristics.}$

ST **electrophotog** printing plate blanks binder; acrylic binder **electrophotog** printing plate

IT Acrylic polymers, uses

RL: USES (Uses)

(binder resin, for **electrophotog.** printing plates)

IT Printing plates

(manuf. of, **electrophotog.** blanks for, acrylic binder for)

IT 146878-67-3P 146878-68-4P 146878-69-5P 146925-48-6P

RL: PREP (Preparation)

(prepn. of, as binder resin for **electrophotog.** printing plate)

IT 139676-55-4DP, Benzyl methacrylate-2-(phosphonooxy)ethyl methacrylate telomer with 2-aminoethylmercaptan, acrylamide 139711-59-4DP, carboxy-terminated, ester with **glycidyl** methacrylate, photolysis product 141348-47-2P 141348-87-0P, Ethylmethacrylate-2-hydroxyethylmethacrylate telomer with thioglycolic acid 2-hydroxy-3-methacryloyloxypropyl ester 147013-21-6DP, hydrolysis product

RL: PREP (Preparation)

(prepn. of, as macromonomer)

L35 ANSWER 32 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 118:103762 CA

TI Dispersions of acrylate polymers in nonaqueous solvents and their manufacture

IN Emoto, Shigeru

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04198351	A2	19920717	JP 1990-326296	19901128
				JP 1990-326296	19901128

AB The title dispersions, having good storage stability and useful in the prepn. of **electrophotog.** toners, coatings compns., etc., comprise copolymers of monomers  $\text{H}_2\text{C:CR1X}$  ( $\text{R1} = \text{H, Me; X} = \text{O}_2\text{CR}_2, \text{CO}_2\text{R}_2; \text{R}_2 = \text{C}_6\text{-20 alkyl}$ ), unsatd. monomers contg. **glycidyl** and carboxy groups, and, optionally, alkenyl (meth)acrylates dispersed in aliph. hydrocarbon and/or silicone oils. Reacting pyridine with an allyl methacrylate-Et

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methacrylate-**glycidyl** methacrylate-methacrylic acid-stearyl methacrylate graft copolymer in isodecane gave a dispersion (av. particle size 0.1-0.15  $\mu$ m) which was used with carbon black in an **electrophotog. toner**.

ST methacrylate copolymer nonaq dispersion; allyl methacrylate copolymer dispersion; **glycidyl** methacrylate copolymer dispersion; methacrylic acid copolymer dispersion; acrylate copolymer nonaq dispersion; **electrophotog toner** polyacrylate nonaq dispersion; coating polyacrylate nonaq dispersion

IT Polymerization  
(dispersion, of (meth)acrylates in nonaq. solvents, for **electrophotog. toners** and coatings)

IT **Electrophotographic** developers  
(toners, acrylate polymer dispersions in nonaq. solvents for)

IT 63832-50-8D, reaction products with pyridine 146163-79-3D, reaction products with pyridine 146163-80-6D, reaction products with pyridine 146226-84-8D, reaction products with pyridine

RL: PROC (Process)  
(dispersion of, in nonaq. solvent, for **electrophotog. toner**)

L35 ANSWER 33 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 115:82205 CA

TI A resin composition for toners and a **toner** containing the same

IN Matusunaga, Takayosi; Tanaka, Susumu; Kosaka, Yoshiyuki; Suzuki, Tatsuo; Okudo, Masazumi

PA Sekisui Chemical Co. Ltd., Japan

SO Eur. Pat. Appl., 24 pp.  
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 412712	A1	19910213	EP 1990-308444	19900731
	EP 412712	B1	19950628		
	R: DE, FR, GB				
				JP 1989-199549	A 19890731
				JP 1989-199550	A 19890731
				JP 1989-199551	A 19890731
				JP 1989-255819	A 19890930
				JP 1989-340467	A 19891226
	JP 03063661	A2	19910319	JP 1989-199549	19890731
	JP 2770991	B2	19980702		
	JP 03063662	A2	19910319	JP 1989-199550	19890731
	JP 03063663	A2	19910319	JP 1989-199551	19890731
	JP 2510291	B2	19960626		
	JP 03118552	A2	19910521	JP 1989-255819	19890930
	JP 2578218	B2	19970205		
	JP 03197969	A2	19910829	JP 1989-340467	19891226
	JP 2578230	B2	19970205		
	CA 2022283	AA	19910201	CA 1990-202283	19900730
				JP 1989-199549	A 19890731
				JP 1989-199550	A 19890731
				JP 1989-199551	A 19890731
				JP 1989-255819	A 19890930
				JP 1989-340467	A 19891226
	US 5262265	A	19931116	US 1993-2101	19930108
				JP 1989-199549	A 19890731
				JP 1989-199550	A 19890731
				JP 1989-199551	A 19890731
				JP 1989-255819	A 19890930
				JP 1989-340467	A 19891226

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			US 1990-559286	B1 19900730
US 5492787	A	19960220	US 1995-384806	19950206
			JP 1989-199549	A 19890731
			JP 1989-199550	A 19890731
			JP 1989-199551	A 19890731
			JP 1989-255819	A 19890930
			JP 1989-340467	A 19891226
			US 1990-559286	B1 19900730
			US 1993-2101	A3 19930108
			US 1993-101785	B1 19930803
TI	A resin composition for toners and a <b>toner</b> containing the same			
AB	An electrostatog. <b>toner</b> compn. is described comprising a blend of resins contg.: (1) a resin obtained by reaction of a metal compd. with a copolymer of styrene, (meth)acrylic ester, and a carboxyl group-contg. vinyl compd.; (2) a copolymer of a vinyl compd. contg. <b>glycidyl</b> or $\beta$ -methylglycidyl group and another vinyl compd.; and optionally (3) styrene-(meth)acrylic ester copolymer. The <b>toner</b> has excellent offset-resistance characteristics over a wide range of mixing temps., among other properties.			
ST	electrostatog <b>toner</b> resin blend; offset resistant <b>toner electrophotog</b>			
IT	<b>Electrophotographic developers</b>			
	(toners, resin blend for)			
IT	62-54-4D, Calcium acetate, reaction product with acrylic polymer			
	1309-48-4D, Magnesium oxide (MgO), reaction product with acrylic polymer			
	1314-13-2D, Zinc oxide (ZnO), reaction product with acrylic polymer			
	25036-16-2D, reaction product with magnesium oxide 25167-42-4			
	25213-39-2 25586-20-3D, reaction product with magnesium oxide			
	25609-90-9D, reaction product with calcium acetate 25609-90-9D, reaction			
	product with magnesium oxide 25767-47-9 <b>25987-66-0D</b> , reaction			
	product with zinc oxide 26374-92-5 26428-43-3 27136-15-8			
	<b>27306-39-4D</b> , reaction product with calcium acetate			
	<b>27306-39-4D</b> , reaction product with zinc oxide 52660-53-4			
	55492-07-4 58048-89-8D, reaction product with zinc oxide 103332-15-6D,			
	reaction product with calcium acetate or zinc oxide 103332-15-6D,			
	reaction product with magnesium oxide <b>135244-30-3D</b> , reaction			
	product with magnesium oxide 135244-31-4D, reaction product with calcium			
	acetate or zinc oxide 135244-32-5			
RL:	USES (Uses)			
	(toner compn. with resin blend contg.)			

L35 ANSWER 34 OF 44 CA COPYRIGHT 2005 ACS on STN

[Full Text](#)

AN 112:149087 CA  
TI **Electrophotographic** material for lithographic plate preparation  
IN Kato, Eiichi; Ishii, Kazuo  
PA Fuji Photo Film Co., Ltd., Japan  
SO Eur. Pat. Appl., 40 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 333415	A2	19890920	EP 1989-302462	19890314
	EP 333415	A3	19910703		
	EP 333415	B1	19930922		
	R: DE, GB				
				JP 1988-58256	A 19880314
				JP 1988-88917	A 19880413
				JP 1988-58256	19880314
	JP 01232356	A2	19890918		
	JP 07101322	B4	19951101		
	JP 01261657	A2	19891018	JP 1988-88917	19880413

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JP 07101232 B4 19951101  
US 5053301 A 19911001 US 1989-322965 19890314  
JP 1988-58256 A 19880314  
JP 1988-88917 A 19880413

TI **Electrophotographic** material for lithographic plate preparation  
AB An **electrophotog.** material suited for lithog. plate prepn. comprises an elec. conductive support and  $\geq 1$  photoconductive layer contg. photoconductive ZnO particles, a binder resin selected from alkyd resin, silicone resins, **epoxy** resins, polyesters, poly(vinyl butyrals), methacrylate copolymers, acrylate copolymers, and vinyl acetate polymer, and natural or synthetic hydrophilic resin grains having an av. grain diam. which is the same as or smaller than the max. grain diam. of the ZnO particles. The **electrophotog.** material is processed by an automatic printing plate-making machine to form a **toner** image and treated with an oil-desensitizing soln. for rendering hydrophilic the nonimage area to give a lithog. plate which provides prints of good image quality, particularly free background stains, from the start of printing, thus reducing loss of prints.

ST **electrophotog** material lithog plate prepn; zinc oxide **electrophotog** lithog plate; hydrophilic resin **electrophotog** lithog plate  
IT **Electrophotographic** photoconductors  
(contg. zinc oxide and binder resins and hydrophilic resin grains for lithog. plate prepn.)  
IT Lithographic plates  
(zinc oxide **electrophotog.** compns. contg. hydrophilic resin grains for prepn. of)  
IT 1314-13-2, Zinc oxide, uses and miscellaneous  
RL: USES (Uses)  
(**electrophotog.** materials contg. hydrophilic resin grains and, for lithog. plate prepn.)  
IT 9003-01-4, Polyacrylic acid 9003-04-7 9046-31-5 9086-70-8  
25322-68-3 28062-47-7 37291-07-9D, Starch-acrylonitrile copolymer, sapond. 57486-24-5, Aquaprene L 710 105187-85-7, KI Gel 201K 108688-17-1, Sumikagel SP 510  
RL: USES (Uses)  
(zinc oxide **electrophotog.** compns. contg., for prepn. of lithog. plates)  
IT 25213-24-5 25704-18-1 27756-39-4 28062-60-4 29960-84-7  
31212-98-3 51131-63-6 55031-97-5 107052-85-7 124919-84-2  
125052-36-0 125120-19-6 125120-20-9 125120-21-0  
125120-23-2 125120-25-4 125120-26-5 125120-27-6 125120-29-8  
125120-66-3 125193-75-1 125193-77-3 127006-47-7  
RL: USES (Uses)  
(zinc oxide **electrophotog.** materials contg., for lithog. plate prepn.)

L35 ANSWER 35 OF 44 CA COPYRIGHT 2005 ACS on STN

[Full Text](#)

```

AN 111:15320 CA
TI Electrostatographic toner
IN Higashida, Osamu; Moribe, Isamu; Kumagai, Yugo
PA Hitachi Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
   CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 63309968	A2	19881219	JP 1987-145760	19870611
				JP 1987-145760	19870611
TI	Electrostatographic toner				

# STN Columbus

- AB Polymer particles, obtained by suspension-polymer. of a mixt. of 80-99 parts% monofunctional monomer and 1-20 parts% crosslinking agent, constitute 1-20% of the title **toner**. The **toner** has good fixability and antioffset property. Thus, a nonaq. dispersing agent was prepd. contg. nonvolatile component 30%. A mixt. of n-hexane 300, Et acrylate 28.8, ethylene glycol dimethacrylate 1.2, and the above soln. of dispersing agent 10 parts was heated in presence of 2,2'-azobis(2,4-dimethylvaleronitrile) under stirring to obtain a dispersion of polymer particles. This dispersion was added with a 8:2 styrene-Bu acrylate monomer mixt. Then, this dispersion was suspension-polymerd. in water contg. poly(vinyl alc.), and the product was melt-blended with C black, Nigrosine dye, and polypropylene to obtain **toner** particles of 15-µm av. diam. The **toner** was mixed with Fe oxide carrier and used for **electrophotog.** copying. Min. fixing temp. was 130°, and the highest non-offset temp. was 140°.
- ST **electrophotog toner** suspension polymer particles
- IT Dispersing agents  
(polymer, crosslinked, for suspension-polymer. in nonaq. media, in manuf. of electrostatog. **toner**)
- IT **Electrophotographic** developers  
(toners, suspension-polymerd. polymer particles in, for improved fixability and offset property)
- IT 25101-94-4, **Glycidyl methacrylate-12-hydroxystearic acid-methacrylic acid-methyl methacrylate copolymer**  
RL: USES (Uses)  
(dispersing agent, for suspension-polymer. in nonaq. media, in manuf. of electrostatog. **toner**)
- IT 90837-33-5, **Butyl acrylate-ethyl acrylate-ethylene glycol dimethacrylate-styrene copolymer** 121177-92-2  
RL: TEM (Technical or engineered material use); USES (Uses)  
(electrostatog. **toner** contg., for improved fixability and offset property)

L35 ANSWER 36 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

AN 109:46137 CA

TI Developer-replenisher material for imaging device

IN Kurotori, Tsuneo; Mochizuki, Manabu; Ariyama, Kenzo; Kuramoto, Shinichi; Sugiyama, Yoshihiro; Takanashi, Hajime; Ishizuka, Takashi; Kudo, Yoshio; Sato, Yoshio

PA Ricoh Co., Ltd., Japan

SO Ger. Offen., 30 pp.  
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	DE 3725002	A1	19880204	DE 1987-3725002	19870728
	DE 3725002	C2	19980430		
				JP 1986-177073	A 19860728
				JP 1986-177074	A 19860728
				JP 1986-232722	A 19860929
				JP 1986-255354	A 19861027
				JP 1986-255355	A 19861027
				JP 1986-255356	A 19861027
	JP 63085570	A2	19880416	JP 1986-232722	19860929
	GB 2194644	A1	19880309	GB 1987-17956	19870728
	GB 2194644	B2	19901219		
				JP 1986-177073	A 19860728
				JP 1986-177074	A 19860728
				JP 1986-232722	A 19860929

# STN Columbus

JP 1986-255354 A 19861027  
 JP 1986-255355 A 19861027  
 JP 1986-255356 A 19861027

AB Developer-replenisher materials for use in electrostatic copying devices are composed of a carrier liq., mainly consisting of an aliph. hydrocarbon, 1000 and toner particles, mainly consisting of a binder resin and a pigment, 200-1200 parts. Thus, a typical developer replenisher contained a 2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate-stearyl methacrylate copolymer, Printex U (C black), Tescon MRP (a natural resin-modified maleic acid), 171P (polyethylene), and Isopar H.

ST electrostatog liq developer replenisher; **electrophotog** liq developer replenisher; electrog liq developer replenisher

IT **Epoxy** resins, uses and miscellaneous  
 Phenolic resins, uses and miscellaneous  
 RL: USES (Uses)  
 (rosin-modified, electrostatog. liq. developer replenisher contg.)

IT **Electrophotographic** developers  
 (liq., replenisher for)

IT **Electrophotographic** development  
 (liq., replenishment in, app. for)

IT 110-16-7D, 2-Butenedioic acid (Z)-, polymers, rosin-modified 115-77-5D, Pentaerythritol, polymers, rosin-modified 147-14-8 522-75-8, Thioindigo 846-70-8, Naphthol yellow S 1229-55-6 1248-18-6, Lithol Red 1325-82-2 1328-53-6, C.I. Pigment Green 7 1836-22-2 2092-56-0 2425-85-6, Permanent Red 4R 2512-29-0, Hansa Yellow 3564-21-4, Permanent Red F5R 5281-04-9 6358-85-6, Benzidine Yellow 6372-81-2, Lake Red D 6417-83-0, Bordeaux 10B 6448-95-9, Brilliant Fast Scarlet 6548-12-5, Peacock blue lake 8033-42-9, Wax A 9002-88-4, DYNK 9002-88-4, Epolene N 45 9003-07-0, Polypropylene 10279-68-2, Naphthol green Y 12634-23-0, Epolene E 14 19381-50-1, Naphthol green B 25068-63-7, **Glycidyl** methacrylate-lauryl methacrylate-methacrylic acid-methyl methacrylate copolymer 26635-64-3, Isooctane 34464-38-5, Isodecane 60382-94-7, 4202E 61725-50-6, Malachite green lake 62610-51-9, Epolene E 15 66813-77-2, Sanwax E 300 68651-46-7, Indigo (dye) 70777-49-0, 4053E 82446-67-1, PED136 82446-73-9, E 2018 90327-88-1, Rhodamine lake 91261-68-6, Tescon MRP 91316-55-1, OA wax 92881-18-0, PED521 92881-19-1, PED522 95078-70-9, PED153 97947-61-0, Acrylic acid-**glycidyl** methacrylate-lauryl methacrylate-methyl methacrylate copolymer 101702-71-0, Acrylic acid-2-hydroxyethyl methacrylate-lauryl methacrylate-methyl methacrylate copolymer 110119-84-1, E 2020 111068-86-1, PED534 113989-07-4, 2-Hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-stearyl methacrylate copolymer 113989-08-5 114013-32-0, Alathon 12 114013-33-1, Alathon 16 114013-34-2, Alathon 22 114013-35-3, Alathon 23 114013-38-6, Bareco 2000 114013-51-3, E 1040 114013-54-6, Epolene E 11 114013-61-5, Isosol 400 114013-62-6, Lithol Fast Yellow 2G 114013-67-1, PE580  
 RL: USES (Uses)  
 (electrostatog. liq. developer replenisher contg.)

L35 ANSWER 37 OF 44 CA COPYRIGHT 2005 ACS on STN  
Full Text  
 AN 106:166178 CA  
 TI Nonaqueous resin dispersions and their use in **electrophotographic** developers  
 IN Tsubuko, Kazuo; Kuramoto, Shinichi; Nagai, Kayoko; Okawara, Makoto; Takanashi, Hajime  
 PA Ricoh Co., Ltd., Japan  
 SO Ger. Offen., 11 pp.  
 CODEN: GWXXBX

## STN Columbus

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3624209	A1	19870122	DE 1986-3624209	19860717
	DE 3624209	C2	19890503		
				JP 1985-157912	A 19850717
				JP 1985-157913	A 19850717
	JP 62018410	A2	19870127	JP 1985-157912	19850717
	JP 62018572	A2	19870127	JP 1985-157913	19850717
	JP 07013766	B4	19950215		
	US 4764447	A	19880816	US 1986-883182	19860708
				JP 1985-157912	A 19850717
				JP 1985-157913	A 19850717
	GB 2178048	A1	19870204	GB 1986-17468	19860717
	GB 2178048	B2	19890802		
				JP 1985-157912	A 19850717
				JP 1985-157913	A 19850717

TI Nonaqueous resin dispersions and their use in **electrophotographic** developers

AB A nonaq. resin dispersion is obtained by polymn. of a compn. contg.  $\geq 1$  monomer (A) of the formula  $H_2C:CR_1R_2$  ( $R = H$  or  $Me$ ;  $R_1 = CO_2C_nH_{2n+1}$  or  $OCOC_nH_{2n+1}$  where  $n = 6-20$ ), a monomer (B) of formula  $H_2C:CR_2CO_2C_mH_{2m}CR_3:CH_2$  ( $R_2, R_3 = H$  or  $Me$ ;  $m = 1-20$ ), and a monomer (C) with a carboxyl or **glycidyl** group in the presence of a polymn. initiator in an aliph. hydrocarbon solvent. A lauryl methacrylate- $H_2C:CHCO_2CH_2CH:CH_2$ -methacrylic acid copolymer dispersion, prepd. by polymn. of the monomers in the presence of azobisisobutyronitrile in kerosine, C black, and kerosine were milled together to give a **toner** conc. which was then dild. with kerosine to produce a liq. electrostatog. developer capable of producing a great no. of excellent copies.

ST nonaq resin dispersion electrostatog developer; **electrophotog** liq developer resin dispersion

IT **Electrophotographic** developers

(liq., nonaq. resin dispersions for)

IT 7631-86-9, Silicon dioxide, uses and miscellaneous 107685-77-8

107685-79-0 107685-80-3 107685-81-4 107685-82-5

RL: USES (Uses)

(electrostatog. liq. developers contg. nonaq. dispersions of)

IT 107685-78-9P 107685-84-7P 107685-85-8P 107685-87-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

L35 ANSWER 38 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 103:203744 CA

TI **Electrophotographic toner**

IN Kori, Shuntaro

PA Minolta Camera Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60142353	A2	19850727	JP 1983-246468	19831229
				JP 1983-246468	19831229

TI **Electrophotographic toner**

AB In the title **toner** contg. a coloring agent and a thermoplastic polymer the thermoplastic polymer is a homopolymer or a copolymer composed of

## STN Columbus

≥1 monomeric unit of the formula -CH<sub>2</sub>C(R<sub>1</sub>)CO<sub>2</sub>R<sub>2</sub>- (R<sub>1</sub> = H, Me; R<sub>2</sub> = H, C<3 alkyl, hydroxyalkyl, aminoalkyl, **glycidyl**) or a copolymer of the above monomeric unit with another monomeric unit of the formula I (R<sub>3</sub> = H, Me) which is a random copolymer contg. <50 wt.% of the monomer unit I. The above homopolymer or copolymer has on its side chain ≥1 of carboxyl, amino, OH, and **glycidyl** functional groups and a no. av. mol. wt. of 9000-30,000.

ST **electrophotog toner** thermoplastic vinyl polymer

IT Vinyl compounds, polymers

RL: USES (Uses)

(polymers, thermoplastic, **electrophotog. toners** contg.)

IT 42751-74-6 88801-59-6 **99146-41-5** 99146-42-6 99146-43-7

99146-44-8 99146-45-9

RL: USES (Uses)

(thermoplastic, **electrophotog. toners** contg.)

L35 ANSWER 39 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 96:26839 CA

TI Electrostatographic toners

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 56080055	A2	19810701	JP 1979-157807	19791204
	JP 63050699	B4	19881011		
				JP 1979-157807	A 19791204

AB A water-contg. pigment cake is mixed with a soln. (in org. solvent) of a copolymer of CH<sub>2</sub>:CR<sub>2</sub>CO<sub>2</sub>R<sub>1</sub> (R = H, Me; R<sub>1</sub> = C1-4 alkyl) and ≥1 monomer selected from unsatd. carboxylic acids, their anhydrides, **glycidyl** methacrylate, and **glycidyl** acrylate, and the water and the org. solvent are removed from the mixt. to give electrostatog. toners. Thus, H<sub>2</sub>O 500,, carbon black 50, and Alkali Blue 20 g were mixed, and an acrylic acid-Me methacrylate copolymer soln. (31.6% solids) 600 g was added to the mixt. The resultant mixt. was dried, and the residue was pulverized to give neg.-charging type electrostatog. toners.

ST **electrophotog toner** binder resin; electrostatog **toner** acrylic binder resin

IT 147-14-8 1328-53-6 5281-04-9 6548-12-5 25322-25-2

**28262-63-7** 39464-61-4 40081-37-6 40111-87-3 68993-80-6

80337-97-9 80337-98-0

RL: TEM (Technical or engineered material use); USES (Uses)

(electrostatog. toners contg., prepn. of)

L35 ANSWER 40 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 93:104821 CA

TI Magnetic **toner**

IN Kawanishi, Tsuneaki; Mukoh, Akio; Morishita, Hirosada

PA Hitachi Metals, Ltd., Japan

SO Eur. Pat. Appl., 61 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 6617	A2	19800109	EP 1979-102144	19790627
	EP 6617	B1	19831207		

## STN Columbus

R: DE, FR, GB

JP 55006308	A2	19800117	JP 1978-77445	19780628
JP 57004904	B4	19820128	JP 1978-77445	19780628

A

## PATENT FAMILY INFORMATION:

FAN 92:224281

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 55006308	A2	19800117	JP 1978-77445	19780628
	JP 57004904	B4	19820128		

A

US 4265993	A	19810505	US 1979-52442	19790626
			JP 1978-77445	A 19780628
EP 6617	A2	19800109	EP 1979-102144	19790627
EP 6617	B1	19831207		

R: DE, FR, GB

JP 1978-77445 19780628

TI Magnetic toner

AB A single component type magnetic toner for electrophotog which transfers well defined images with high efficiency is composed of ferromagnetic material (50-75%) and resinous material (softening point 90-130°). Av. size of the power particle is 5-25  $\mu$ , elec. resistivity 1013-1015  $\Omega$ cm (at 4000 V/cm d.c.), and dielec. const. 2.6-5. Thus, a mixt. of magnetite (EPT-500 Tode Kogyo Co.) 60, resin (prepd. from styrene 44.0, n-Bu methacrylate 40.2, acrylic acid 15.8 mol%) 35, carbon black 5 wt. parts was plasticized at 110-120°, pulverized, mixed with 0.5% of Aerosil R 972, heat-treated at 200-300°, and classified to give magnetic toner particles (3-30  $\mu$ ), which when mixed with carbon black (0.1%) had an elec. cond. 4  $\times 10^{-13}$  S.cm<sup>-1</sup> in elec. field of 4000 V/cm d.c. and dielec. const. 3.8 at frequency 100 kHz. The toner when used in a copying process gave excellent transferred-fixed images.

ST electrophotog magnetic toner single component

IT Acrylic polymers, uses and miscellaneous

Carbon black, uses and miscellaneous

Epoxy resins, uses and miscellaneous

Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous

Phenolic resins, uses and miscellaneous

Polyamides, uses and miscellaneous

Polyesters, uses and miscellaneous

RL: USES (Uses)

(electrophotog. magnetic toners contg., single-component, for image transfer)

IT 1309-38-2, uses and miscellaneous 7631-86-9, uses and miscellaneous

11099-03-9 24937-78-8 25068-38-6 25586-20-3 25609-90-9

27306-39-4 39316-78-4 64155-52-8 68938-89-6

73827-15-3 74564-92-4 74565-71-2 74565-97-2 74566-08-8

RL: USES (Uses)

(electrophotog. magnetic toners contg., single-component, for image transfer)

L35 ANSWER 41 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 90:160131 CA

TI Developers for electrophotographic lithographic plates

IN Kawanishi, Toshiyuki; Kaneko, Jiichi; Kitahara, Fumio

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

## STN Columbus

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53123138	A2	19781027	JP 1977-37234	19770401
	JP 62060704	B4	19871217		
				JP 1977-37234	A 19770401

TI Developers for **electrophotographic** lithographic plates

AB Toners for developing **electrophotog.** plates for prepg. lithog. plates contain a compd. of the general formula  $RO_2CCH_2CH(SO_3M)CO_2R_1$  (R, R1 = C6-12 alkyl; M = metal ion) or a compd. of the formula  $R_2CO_2H.H_2NR_3$  (R2 = C2-6 alkyl; R3 = C8-18 alkyl) and a graft copolymer obtained by grafting an unsatd. carboxylic acid (or its anhydride) to a copolymer of a monomer of the general formula  $CH_2:CR_4R_5$  [I; R4 = H, Me; R5 =  $CO_2CnH_{2n+1}$ ,  $O_2CCnH_{2n+1}$ ,  $OCnH_{2n+1}$  (n = 6-20)] and **glycidyl** (meth)acrylate and subsequently grafting thereon (on the side chain formed by the initial graft copolymn.) a monomer of the general formula  $CH_2:CR_6R_7$  [II; R6 = H, Me; R7 =  $CO_2CnH_{2n+1}$  (n = 1-4),  $O_2CCmH_{2m+1}$  (m = 1-5), Ph, tolyl, chlorophenyl] or a mixt. of the monomer II with another monomer of the general formula  $CH_2:CR_8R_9$  [III; R8 = H, Me; R9 =  $CO_2C_2H_4N(CnH_{2n+1})(CmH_{2m+1})$  (m, n = 1-4),  $CO_2H$ ,  $CO_2CH_2CH_2OH$ , glycidyloxycarbonyl, nitrophenyl, p-dimethylaminophenyl, hydroxyphenyl, carboxyphenyl, aminophenyl, 2-pyridyl, 4-pyridyl, succinimido]. Optionally, a graft copolymer obtained by grafting **glycidyl** (meth)acrylate on a copolymer of I with an unsatd. carboxylic acid or its anhydride and subsequently grafting II or a I-III mixt. on the side chain formed by the initial graft copolymn. can be used. The toners exhibit excellent charging properties and ink affinity. Thus, lauryl methacrylate 194 and **glycidyl** methacrylate 6 g were copolymd., then methacrylic acid 1.5 g was grafted thereon at 80° in the presence of Et3N, and subsequently vinyl acetate 150 g was grafted thereon in the presence of azobis(isobutyronitrile) to give a copolymer dispersion, which was dild. to 5 wt.%. A 5 wt.% didodecyl manganosulfosuccinate soln. (in cyclohexane) 200 mL was then added to the dispersion to give a developer soln. A lithog. plate prepd. by development of a com. **electrophotog.** plate by using the above developer gave high quality prints.

ST **glycidyl** methacrylate copolymer **toner electrophotog**

IT Lithographic plates  
(**electrophotog.**, **electrophotog.** developers with toners contg. **glycidyl** methacrylate graft copolymer for prodn. of)

IT Photography, electro-, developers  
(toners, contg. **glycidyl** methacrylate graft copolymer for lithog. plate prepn.)

IT 69884-41-9  
RL: USES (Uses)  
(**electrophotog.** developer toners contg. **glycidyl** methacrylate graft copolymer and, for lithog. plate prepn.)

IT 25068-63-7 40793-13-3 69941-24-8  
RL: USES (Uses)  
(graft, **electrophotog.** developer toners contg., for lithog. plate prepn.)

L35 ANSWER 42 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

AN 90:64459 CA

TI Magnetic toners for electrostatic image development

IN Mukoo, Akio; Kawanishi, Tsuneaki; Morishita, Yasusada; Hoshi, Nobuyoshi; Anzai, Masayasu

PA Hitachi Metals, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF

DT Patent

## STN Columbus

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53103744	A2	19780909	JP 1977-18164	19770223
				JP 1977-18164	A 19770223

AB In prep. magnetic toners, a binder resin having OH, CO<sub>2</sub>H, and/or glycidyl groups is used, and the elec. resistivity of the toners is  $\geq 10^6 \Omega\text{-cm}$ . The toners exhibit excellent transferability. Thus, acrylic acid-Bu acrylate-Me methacrylate-styrene (15:40:10:35 wt. ratio) copolymer (mol. wt. 12,000, softening point 93-100°) 45, magnetite 50, and carbon black 5 parts were kneaded at 100-10° and pulverized to give a magnetic toner whose elec. resistivity was  $10^{15} \Omega\text{-cm}$ . The transfer efficiency of the toner images (at 6 kV corona discharge) from a ZnO-based electrophotog. paper to a receptor paper was 92% vs.  $\leq 60\%$  for a control toner prep. with an acrylic acid-free copolymer.

ST magnetic toner electrostatog developer; electrophotog magnetic toner acid copolymer

IT Phenolic resins, uses and miscellaneous

RL: USES (Uses)

(resin-modified, electrophotog. magnetic toners contg. magnetite and)

IT Electrography

(developers, magnetic toners for, binder resins contg. hydroxy, carboxy or glycidyl groups for)

IT Photography, electro-, developers

(magnetic, toners, binder resins contg. hydroxy, carboxy or glycidyl groups for)

IT 1309-38-2, properties

RL: PRP (Properties)

(electrophotog. magnetic toners contg. binder resin contg. hydroxy, carboxy or glycidyl groups and)

IT 25036-16-2 26588-80-7 27306-39-4 37953-21-2 42376-83-0  
53808-40-5

RL: USES (Uses)

(electrophotog. magnetic toners contg. magnetite and)

L35 ANSWER 43 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

AN 85:114796 CA

TI Transferring paper for electrophotography

IN Tanaka, Hiroshi; Soma, Ikuo

PA Canon KK, Japan

SO U.S., 10 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3950595	A	19760413	US 1973-419046	19731126
				US 1973-419046	A 19731126

TI Transferring paper for electrophotography

AB A receptor paper for electrophotog. toner images obtained by liq. development is prep. by coating a paper support with a polymer or a copolymer prep. from  $\geq 1$  monomer CH<sub>2</sub>:C(R)CO<sub>2</sub>R<sub>1</sub> (R = H, Me; R<sub>1</sub> = alkyl) and  $\geq 1$  monomer selected from unsatd. carboxylic acids and acrylonitrile. The receptor paper so prep. has a high image transfer efficiency and provides fogless and clear images. The receptor paper also does not absorb excessive amt. of a carrier liq. and thus prevents the prodn. of a large quantity of the carrier vapor at the dry-fixing stage.

# STN Columbus

Thus, a CdS powder 100 and a 30% soln. of a vinyl acetate-vinyl chloride polymer in PhMe 20 parts were mixed, coated on an Al plate as a 40- $\mu$  layer (dry thickness), dried, covered by a 30- $\mu$  poly(ethylene terephthalate) film using an **epoxy** resin adhesive, **electrophotog.** imaged and developed in a liq. soln. prepd. from carbon black, a cyclized rubber, polyethylene, a coumarone resin and Isopar G. A sheet of paper (60 g/m<sup>2</sup>) prepd. from a needle-leaved tree bleached pulp 20, a broad-leaved tree bleached kraft pulp 80, a rosin size 0.3, alum 1.5 and talc 8 parts was coated with a sizing soln. consisting of acrylic acid-ethyl acrylate-methyl methacrylate polymer 70, methyl cellulose 0.5, clay 30, a melamine resin 0.5, a silicon antifoaming agent 0.1 and H<sub>2</sub>O 100 parts at 3 g/m<sup>2</sup> (solids content) and dried. The developed **electrophotog.** image was then transferred onto the receptor paper by corona transfer process and air-dried to give a clear image. The d., the fixability and the uniformity of the transferred image were 1.2, 95% and 9.0, resp.

ST receptor paper **electrophotog** image

IT Sizes

(alkyl acrylate copolymers as, for **electrophotog.** image-receiving papers)

IT Clays

RL: USES (Uses)

(coatings contg., for **electrophotog.** image-receiving papers)

IT 108-78-1, uses and miscellaneous 9002-89-5 9003-20-7 9003-55-8

9004-67-5 9005-25-8D, Starch, oxidized 24937-78-8 25135-39-1

25718-90-5 **53934-24-0** 53934-25-1 **54112-06-0**

60350-48-3 60350-49-4

RL: USES (Uses)

(sizing compn. contg., for **electrophotog.** image-receiving papers)

L35 ANSWER 44 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

AN 85:114778 CA

TI **Electrophotographic** suspension developer

IN Tsubuko, Kazuo; Kurotori, Tsuneo; Kimura, Taro; Kawanishi, Toshiyuki; Kaneko, Yoshikazu

PA Ricoh Co., Ltd., Japan

SO Ger. Offen., 30 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 2538581	A1	19760311	DE 1975-2538581	19750829
	DE 2538581	C3	19791018		
	DE 2538581	B2	19790222		
				JP 1974-100590	A 19740903
	JP 51126152	A2	19761104	JP 1974-100590	19740903
	JP 55010195	B4	19800314		
					A
	US 4081391	A	19780328	US 1975-608832	19750829
				JP 1974-100590	A 19740903

TI **Electrophotographic** suspension developer

AB An **electrophotog.** suspension developer is described which has an outstanding dispersion stability, fixability, and redispersibility and which is esp. useful in the prodn. of offset lithog. plates. The developer consists essentially of a pigment or dye and a resin composed of the graft polymer of a vinyl monomer with the ester of a **glycidyl** acrylate or methacrylate polymer dispersed in a carrier liq. Thus, a polymer dispersion (prepd. by polymn. of 2-ethylhexyl methacrylate with

# STN Columbus

glycidyl methacrylate, subsequent esterification with acrylic acid, polymn. with Me methacrylate, addn. of polyethylene, and graft polymn. of this mixt. with vinylpyridine) 50 g, carbon black 5, C.I. 50415 1, and Isopar H 100g were ball-milled for 40 hr to give a developer conc. This conc. 10g was then dispersed in Isopar H 2 l. to give a suspension developer which when used in an **electrophotog.** development process to develop a ZnO-based paper gave an image d. of 1.20. On storage of the developer for 7 days at 50° very little change in stability was noted.

- ST acrylic polymer **electrophotog** suspension developer  
 IT Carbon black, uses and miscellaneous  
 RL: USES (Uses)  
 (**electrophotog.** liq. developer with **toner** contg. acrylic polymer, wax, and)  
 IT Acrylic polymers  
 RL: USES (Uses)  
 (**electrophotog.** liq. developers for toners contg. pigments and graft)  
 IT Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous  
 RL: USES (Uses)  
 (**electrophotog.** liq. developers with toners contg. acrylic polymers, pigments, and)  
 IT Lithographic plates  
 (offset, **electrophotog.** liq. developers with toners contg. graft polymers and pigments for prepn. of)  
 IT 1317-61-9 1324-77-2 6358-85-6 11099-03-9 30586-15-3 60454-60-6  
 RL: USES (Uses)  
 (**electrophotog.** liq. developer with **toner** contg. acrylic polymer, wax, and)  
 IT 59158-34-8  
 RL: USES (Uses)  
 (graft, **electrophotog.** liq. developers contg. pigment and)  
 IT 59041-18-8 59158-30-4 59412-59-8 60436-47-7 60436-49-9 60663-46-9  
 RL: USES (Uses)  
 (graft, **electrophotog.** liq. developers with toners contg. pigment and)  
 IT 9002-88-4  
 RL: USES (Uses)  
 (wax, **electrophotog.** liq. developer with **toner** contg. acrylic polymer, pigment, and)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	70.82	71.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-10.20	-10.20

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	ENTRY	SESSION
FULL ESTIMATED COST	0.18	71.42
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-10.20

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FILE COVERS 1907 - 7 Apr 2005 VOL 142 ISS 16  
 FILE LAST UPDATED: 7 Apr 2005 (20050407/ED)

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(FILE 'HOME' ENTERED AT 07:56:30 ON 14 APR 2005)

FILE 'CA' ENTERED AT 07:57:34 ON 14 APR 2005  
 ACT A658811A1/A

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L1 (      315)SEA FILE=REGISTRY ("ISOPROPYL METHACRYLATE"/CRN OR "ISOPROPYL 2
L2 (      6017)SEA FILE=REGISTRY ("ACRYESTER L"/CRN OR "AGEFLEX FM 246"/CRN OR
L3 (      4230)SEA FILE=REGISTRY ("ACRYESTER S"/CRN OR "BLEMME SMA"/CRN OR "L
L4 (      519)SEA FILE=REGISTRY ("ENT 8767"/CRN OR "N-OCTYL METHACRYLATE"/CRN
L5 (      103)SEA FILE=REGISTRY ("AMYL METHACRYLATE"/CRN OR "N-AMYL METHACRYL
L6 (      660)SEA FILE=REGISTRY ("N-PROPYL METHACRYLATE"/CRN OR "NSC 32624"/C
L7 (      474)SEA FILE=REGISTRY ("MYRISTYL METHACRYLATE"/CRN OR "TETRADECYL M
L8 (      890)SEA FILE=REGISTRY (METHOXYETHENE/CRN OR METHOXYETHYLENE/CRN OR
L9 (      2491)SEA FILE=REGISTRY (ETHOXYETHENE/CRN OR ETHOXYETHYLENE/CRN OR "E
L10 (      848)SEA FILE=REGISTRY (BUTOXYETHENE/CRN OR BUTOXYETHYLENE/CRN OR "B
L11 (      97008)SEA FILE=REGISTRY 80-62-6/CRN OR 97-63-2/CRN OR L1 OR 88-12-0/C
L12 (      92191)SEA FILE=REGISTRY 141-32-2/CRN OR 97-88-1/CRN OR L2 OR 106-91-2
L13 (      94944)SEA FILE=REGISTRY 79-41-4/CRN OR 79-10-7/CRN OR 140-10-3/CRN OR
L14 (      17116)SEA FILE=REGISTRY L13 AND L11 AND L12 AND PMS/CI
L15 (      14247)SEA FILE=CA L14
L16 (      80)SEA FILE=CA L15 (P) (BINDER OR RESIN) AND TONER

```

-----  
 ACT A658811/A  
 -----

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L17 (      315)SEA FILE=REGISTRY ("ISOPROPYL METHACRYLATE"/CRN OR "ISOPROPYL 2
L18 (      6017)SEA FILE=REGISTRY ("ACRYESTER L"/CRN OR "AGEFLEX FM 246"/CRN OR
L19 (      4230)SEA FILE=REGISTRY ("ACRYESTER S"/CRN OR "BLEMME SMA"/CRN OR "L
L20 (      519)SEA FILE=REGISTRY ("ENT 8767"/CRN OR "N-OCTYL METHACRYLATE"/CRN
L21 (      103)SEA FILE=REGISTRY ("AMYL METHACRYLATE"/CRN OR "N-AMYL METHACRYL
L22 (      660)SEA FILE=REGISTRY ("N-PROPYL METHACRYLATE"/CRN OR "NSC 32624"/C

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## STN Columbus

L23 ( 474)SEA FILE=REGISTRY ("MYRISTYL METHACRYLATE"/CRN OR "TETRADECYL M  
 L24 ( 890)SEA FILE=REGISTRY (METHOXYETHENE/CRN OR METHOXYETHYLENE/CRN OR  
 L25 ( 2491)SEA FILE=REGISTRY (ETHOXYETHENE/CRN OR ETHOXYETHYLENE/CRN OR "E  
 L26 ( 848)SEA FILE=REGISTRY (BUTOXYETHENE/CRN OR BUTOXYETHYLENE/CRN OR "B  
 L27 ( 97008)SEA FILE=REGISTRY 80-62-6/CRN OR 97-63-2/CRN OR L17 OR 88-12-0/  
 L28 ( 92191)SEA FILE=REGISTRY 141-32-2/CRN OR 97-88-1/CRN OR L18 OR 106-91-  
 L29 ( 94944)SEA FILE=REGISTRY 79-41-4/CRN OR 79-10-7/CRN OR 140-10-3/CRN OR  
 L30 ( 17116)SEA FILE=REGISTRY L29 AND L27 AND L28 AND PMS/CI  
 L31 14247 SEA FILE=CA L30  
 -----  
 L32 3617 S L31 AND (GLYCIDYL OR EPOXY OR OXIRANE)  
 L33 84 S L32 AND TONER  
 L34 48 S L33 NOT (LIQUID (2W) (TONER# OR DEVELOP?))  
 L35 44 S L34 AND ELECTROPHOTOG?

FILE 'STNGUIDE' ENTERED AT 08:00:09 ON 14 APR 2005

FILE 'CA' ENTERED AT 08:01:48 ON 14 APR 2005

=> s l35 not (liq# (w) (toner# or develop?))  
 953435 LIQ#  
 31322 TONER#  
 2022478 DEVELOP?  
 2956 LIQ# (W) (TONER# OR DEVELOP?)  
 L36 36 L35 NOT (LIQ# (W) (TONER# OR DEVELOP?))

=> fil stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.83	77.25
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-10.20

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=> fil ca; d hitstr l34 35

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	77.67
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-10.20

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FILE COVERS 1907 - 7 Apr 2005 VOL 142 ISS 16  
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L34 ANSWER 35 OF 48 CA COPYRIGHT 2005 ACS on STN  
IT 125120-19-6 125120-20-9

RL: USES (Uses)

(zinc oxide electrophotog. materials contg., for lithog. plate prepn.)

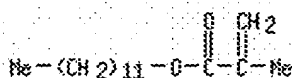
RN 125120-19-6 CA

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with oxiranylmethyl 2-methyl-2-propenoate, 2-propenenitrile and 2-propenoic acid, graft (9CI)  
(CA INDEX NAME)

CM 1

CRN 142-90-5

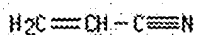
CMF C16 H30 O2



CM 2

CRN 107-13-1

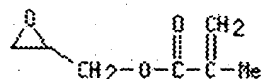
CMF C3 H3 N



CM 3

CRN 106-91-2

CMF C7 H10 O3

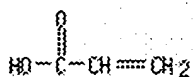


CM 4

CRN 79-10-7

CMF C3 H4 O2

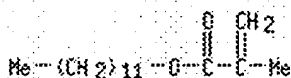
# STN Columbus



RN 125120-20-9 CA  
 CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with  
 1-ethenyl-2-pyrrolidinone, oxiranylmethyl 2-methyl-2-propenoate and  
 2-propenoic acid, graft (9CI) (CA INDEX NAME)

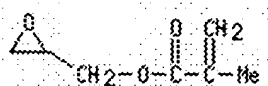
CM 1

CRN 142-90-5  
 CMF C16 H30 O2



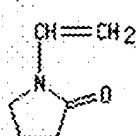
CM 2

CRN 106-91-2  
 CMF C7 H10 O3



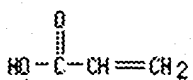
CM 3

CRN 88-12-0  
 CMF C6 H9 N O



CM 4

CRN 79-10-7  
 CMF C3 H4 O2



=> d 135 35 hitstr

# STN Columbus

L35 ANSWER 35 OF 44 CA COPYRIGHT 2005 ACS on STN

IT 25101-94-4, Glycidyl methacrylate-12-hydroxystearic acid-methacrylic acid-methyl methacrylate copolymer

RL: USES (Uses)

(dispersing agent, for suspension-polymn. in nonaq. media, in manuf. of electrostatog. toner)

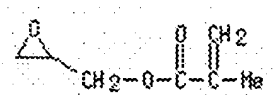
RN 25101-94-4 CA

CN Octadecanoic acid, 12-hydroxy-, polymer with methyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid and oxiranylmethyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

CRN 106-91-2

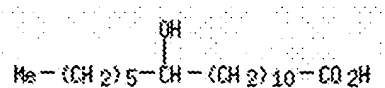
CMF C7 H10 O3



CM 2

CRN 106-14-9

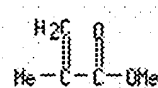
CMF C18 H36 O3



CM 3

CRN 80-62-6

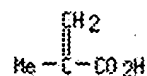
CMF C5 H8 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



=> fil stnguide

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

# STN Columbus

FULL ESTIMATED COST	5.67	83.34
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-10.20

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FILE 'CA' ENTERED AT 07:57:34 ON 14 APR 2005  
 ACT A658811A1/A

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L1 (      315)SEA FILE=REGISTRY ("ISOPROPYL METHACRYLATE"/CRN OR "ISOPROPYL 2
L2 (      6017)SEA FILE=REGISTRY ("ACRYESTER L"/CRN OR "AGEFLEX FM 246"/CRN OR
L3 (      4230)SEA FILE=REGISTRY ("ACRYESTER S"/CRN OR "BLEMME SMA"/CRN OR "L
L4 (      519)SEA FILE=REGISTRY ("ENT 8767"/CRN OR "N-OCTYL METHACRYLATE"/CRN
L5 (      103)SEA FILE=REGISTRY ("AMYL METHACRYLATE"/CRN OR "N-AMYL METHACRYL
L6 (      660)SEA FILE=REGISTRY ("N-PROPYL METHACRYLATE"/CRN OR "NSC 32624"/C
L7 (      474)SEA FILE=REGISTRY ("MYRISTYL METHACRYLATE"/CRN OR "TETRADECYL M
L8 (      890)SEA FILE=REGISTRY (METHOXYETHENE/CRN OR METHOXYETHYLENE/CRN OR
L9 (      2491)SEA FILE=REGISTRY (ETHOXYETHENE/CRN OR ETHOXYETHYLENE/CRN OR "E
L10 (      848)SEA FILE=REGISTRY (BUTOXYETHENE/CRN OR BUTOXYETHYLENE/CRN OR "B
L11 (      97008)SEA FILE=REGISTRY 80-62-6/CRN OR 97-63-2/CRN OR L1 OR 88-12-0/C
L12 (      92191)SEA FILE=REGISTRY 141-32-2/CRN OR 97-88-1/CRN OR L2 OR 106-91-2
L13 (      94944)SEA FILE=REGISTRY 79-41-4/CRN OR 79-10-7/CRN OR 140-10-3/CRN OR
L14 (      17116)SEA FILE=REGISTRY L13 AND L11 AND L12 AND PMS/CI
L15 (      14247)SEA FILE=CA L14
L16 (      80)SEA FILE=CA L15 (P) (BINDER OR RESIN) AND TONER
  
```

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 ACT A658811/A  
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L17 (      315)SEA FILE=REGISTRY ("ISOPROPYL METHACRYLATE"/CRN OR "ISOPROPYL 2
L18 (      6017)SEA FILE=REGISTRY ("ACRYESTER L"/CRN OR "AGEFLEX FM 246"/CRN OR
L19 (      4230)SEA FILE=REGISTRY ("ACRYESTER S"/CRN OR "BLEMME SMA"/CRN OR "L
L20 (      519)SEA FILE=REGISTRY ("ENT 8767"/CRN OR "N-OCTYL METHACRYLATE"/CRN
L21 (      103)SEA FILE=REGISTRY ("AMYL METHACRYLATE"/CRN OR "N-AMYL METHACRYL
L22 (      660)SEA FILE=REGISTRY ("N-PROPYL METHACRYLATE"/CRN OR "NSC 32624"/C
L23 (      474)SEA FILE=REGISTRY ("MYRISTYL METHACRYLATE"/CRN OR "TETRADECYL M
L24 (      890)SEA FILE=REGISTRY (METHOXYETHENE/CRN OR METHOXYETHYLENE/CRN OR
L25 (      2491)SEA FILE=REGISTRY (ETHOXYETHENE/CRN OR ETHOXYETHYLENE/CRN OR "E
L26 (      848)SEA FILE=REGISTRY (BUTOXYETHENE/CRN OR BUTOXYETHYLENE/CRN OR "B
L27 (      97008)SEA FILE=REGISTRY 80-62-6/CRN OR 97-63-2/CRN OR L17 OR 88-12-0/
L28 (      92191)SEA FILE=REGISTRY 141-32-2/CRN OR 97-88-1/CRN OR L18 OR 106-91-
L29 (      94944)SEA FILE=REGISTRY 79-41-4/CRN OR 79-10-7/CRN OR 140-10-3/CRN OR
L30 (      17116)SEA FILE=REGISTRY L29 AND L27 AND L28 AND PMS/CI
L31 (      14247)SEA FILE=CA L30
  
```

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L32 (      3617)S L31 AND (GLYCIDYL OR EPOXY OR OXIRANE)
L33 (      84)S L32 AND TONER
L34 (      48)S L33 NOT (LIQUID (2W) (TONER# OR DEVELOP?))
L35 (      44)S L34 AND ELECTROPHOTOGRAPH
  
```

FILE 'STNGUIDE' ENTERED AT 08:00:09 ON 14 APR 2005

# STN Columbus

FILE 'CA' ENTERED AT 08:01:48 ON 14 APR 2005  
L36 36 S L35 NOT (LIQ# (W) (TONER# OR DEVELOP?))

FILE 'STNGUIDE' ENTERED AT 08:02:20 ON 14 APR 2005

FILE 'CA' ENTERED AT 08:06:15 ON 14 APR 2005

FILE 'STNGUIDE' ENTERED AT 08:08:00 ON 14 APR 2005

=> fil ca; d kwic fbib 15-29 l35

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.54	83.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-10.20

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FILE COVERS 1907 - 7 Apr 2005 VOL 142 ISS 16  
FILE LAST UPDATED: 7 Apr 2005 (20050407/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

L35 ANSWER 15 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

TI Polymer composition and **electrophotographic toner** using it  
AB . . . 105-5 x 106 and acid value  $\geq 10$  mg KOH/g larger than that of a and (B) a vinyl polymer having **glycidyl** or  $\beta$ -methylglycidyl groups. A **toner** contg. the compn. is also claimed. The **toner** shows good antiblocking and antioffset properties and high fixability at a various temp. range.  
ST vinyl polymer **glycidyl** binder **electrophotog toner**; acrylic styrene copolymer binder **electrophotog toner**  
IT Binders  
    **Electrophotographic toners**  
        (high-fixability **electrophotog. toner** contg. vinyl polymer-based binder)  
IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer  
    25987-66-0P, Butyl acrylate-methacrylic acid-methyl methacrylate-styrene copolymer 26428-43-3P, Butyl acrylate-glycidyl methacrylate-styrene copolymer 27306-43-0P, Acrylic

# STN Columbus

acid-2-ethylhexyl acrylate-methyl methacrylate-styrene copolymer  
50327-91-8P, Butyl acrylate-glycidyl acrylate-methyl  
methacrylate-styrene copolymer  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(high-fixability **electrophotog. toner** contg. vinyl  
polymer-based binder)

AN 127:169058 CA  
TI Polymer composition and **electrophotographic toner** using it  
IN Okuto, Masazumi; Furukawa, Toshiharu  
PA Sekisui Chemical Co. Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 09185182	A2	19970715	JP 1996-209	19960105
				JP 1996-209	19960105

L35 ANSWER 16 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

TI Preparing printing plates by **electrophotography**  
AB Printing plates are prepd. by forming a **toner** image on a peelable  
transfer layer contg. a resin, capable of being removed by chem. reaction,  
on an **electrophotog.** light-sensitive element, providing an adhesive  
layer contg. a thermoplastic resin only on the **toner** image, transferring  
the **toner** image together with the transfer layer and the adhesive layer  
from the element to a temporary receptor, transferring the **toner** image  
with the layers to a receiving material with a hydrophilic surface, and  
partially removing the transfer layer by chem. . . .  
ST printing plate prepn **electrophotog** image transfer  
IT Lithographic plates  
Printing plates  
(prepn. by **electrophotog. toner** image transfer  
process)  
IT **Electrophotography**  
(printing plate prepn. by **toner** image transfer process of)  
IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(printing plate prepn. by **toner** image transfer process using  
**electrophotog.** photoreceptors contg.)  
IT 29014-80-0, Dodecyl methacrylate-methacrylic acid copolymer 93059-20-2,  
FOC-1400 169045-60-7, Acrylic acid-benzyl methacrylate-2-butoxyethyl  
methacrylate copolymer 186587-88-2 188951-12-4 188951-13-5  
188951-20-4 188951-24-8, Methacrylic acid-methyl methacrylate-vinyl  
butyrate copolymer 188951-25-9, Acrylic acid;2,3-dimethoxypropyl  
methacrylate;2-phenylethyl methacrylate copolymer  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in prepg. transfer layers for **electrophotog.** photoreceptors  
for manuf. of printing plates)  
IT 26616-87-5, 1,3-Butadiene-styrene-vinyl acetate copolymer 188950-63-2,  
Acrylic acid;benzyl methacrylate;bis(methacryoxyethyl)  
butandioate;2-butoxyethyl methacrylate;octadecyl methacrylate graft  
copolymer 188950-65-4, Acrylic acid;3-butoxypropyl methacrylate;  
hexadecyl methacrylate;octadecyl methacrylate;2-phenylethyl methacrylate  
graft copolymer 188950-67-6, 2-Carboxyethyl acrylate;2,3-  
diethoxypropyl methacrylate;dodecyl methacrylate;methyl  
methacrylate;5-[3-[(2-methyl-1-oxo-2-propenyl)oxy]-1-oxopropoxy]pentyl  
methacrylate graft copolymer 188950-68-7 188950-69-8 188950-70-1  
188950-71-2 188950-73-4 188950-74-5 188950-75-6 188950-76-7

## STN Columbus

188950-77-8 188950-79-0 188950-80-3, Crotonic acid;ethenyl  
 2-[(1-oxo-2-propenyl)oxy]ethyl butanedioate;tridecyl methacrylate;vinyl  
 acetate;vinyl valerate graft copolymer 188950-82-5, Benzyl  
 methacrylate;dodecyl methacrylate;2-[2-(hexyloxy)ethoxy]ethyl  
 methacrylate;2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 11-[(2-methyl-1-oxo-2-  
 propenyl)amino]undecanoate;2-sulfoethyl methacrylate graft copolymer  
 188950-83-6 188950-85-8 188950-86-9 188950-88-1 188950-89-2  
 188950-90-5 188950-91-6 188950-92-7 188950-93-8  
 188950-94-9 188950-95-0 188950-96-1 188950-97-2 188950-99-4  
 188951-00-0 188951-01-1 188951-02-2 188951-03-3 188951-04-4  
 188951-05-5 188951-06-6 188951-07-7 188951-08-8 188951-09-9  
 188951-10-2 189120-14-7 189890-33-3  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (prepn. and use in prepg. transfer layers for **electrophotog.**  
 photoreceptors for manuf. of printing plates)  
 IT 186522-24-7, Tetradecyl methacrylate-methacrylic acid copolymer  
 186522-49-6  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (printing plate prepn. by **electrophotog.** image transfer  
 process using liq. developers contg.)  
 IT 53192-53-3, **Glycidyl** methacrylate-methyl acrylate-methyl  
 methacrylate copolymer 186094-52-0  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (printing plate prepn. by **electrophotog. toner**  
 image transfer process using primary receptors contg.)  
 IT 85-44-9, Phthalic anhydride 574-93-6, Phthalocyanine 1314-13-2, Zinc  
 oxide, uses 15008-36-3 17501-44-9, Zirconium acetylacetonate  
 28630-43-5, **Glycidyl** methacrylate-methacrylic  
 acid-methyl methacrylate copolymer 30525-33-8, Acrylic  
 acid-dodecyl methacrylate-methyl methacrylate copolymer 36034-82-9  
 113374-95-1 173783-73-8 176762-83-7 182559-23-5 188951-11-3  
 188951-14-6 188951-15-7 188951-17-9 188951-26-0, Methyl  
 methacrylate-4-methylstyrene-3-(trimethoxysilyl)propyl methacrylate  
 copolymer 188951-28-2 188951-30-6 188951-31-7 188951-32-8  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (printing plate prepn. by **toner** image transfer process using  
**electrophotog.** photoreceptors contg.)  
 AN 126:349707 CA  
 TI Preparing printing plates by **electrophotography**  
 IN Kato, Eiichi; Nakazawa, Yusuke; Ishii, Kazuo  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Brit. UK Pat. Appl., 248 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2302063	A1	19970108	GB 1996-12258	19960612
	GB 2302063	B2	19990203		
	US 5700612	A	19971223	JP 1995-144885	A 19950612
				US 1996-661723	19960611
				JP 1995-144885	A 19950612
	JP 09062038	A2	19970307	JP 1996-151364	19960612
				JP 1995-144885	A 19950612

L35 ANSWER 17 OF 44 CA COPYRIGHT 2005 ACS on STN  
Full Text  
 TI **Electrophotographic** developer containing **toner** particles having shapes  
 different from each other  
 AB The developer contains **toner** particles which comprises at least a  
 coloring agent and a resin, wherein shapes of the **toner** particles are

# STN Columbus

combination of  $\geq 2$  selected from globular, fibrous (having many needle fibers on the surface), and amorphous. The coloring. . .

ST liq **electrophotog** developer **toner** shape; coloring agent liq **electrophotog** developer

IT Carbon black, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Mogul A; **electrophotog**. developer contg. **toner** particles having shapes of combination of globular, fibrous, and amorphous)

IT **Electrophotographic** developers  
(liq. **electrophotog**. developer contg. **toner** particles as mixt. of those with globular, fiber-contg., and/or amorphous shape)

IT **Electrophotographic** developers  
(liq.; **electrophotog**. developer contg. **toner** particles having shapes of combination of globular, fibrous, and amorphous)

IT Rosin  
RL: TEM (Technical or engineered material use); USES (Uses)  
(maleated; **electrophotog**. developer contg. **toner** particles having shapes of combination of globular, fibrous, and amorphous)

IT 147-14-8DP, diazotized, reaction products with methacrylic acid-stearyl methacrylate copolymer 27401-06-5DP, Methacrylic acid-stearyl methacrylate copolymer, reaction products with diazotized copper phthalocyanine blue 32761-10-7P, Stearyl methacrylate-styrene copolymer  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**electrophotog**. developer contg. **toner** particles having shapes of combination of globular, fibrous, and amorphous)

IT 91825-10-4, BR 89  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(**electrophotog**. developer contg. **toner** particles having shapes of combination of globular, fibrous, and amorphous)

IT 147-14-8 548-62-9, Crystal Violet 980-26-7, Pigment Red 122 5280-68-2, Pigment Red 146 5281-04-9, Carmine 6B 6358-85-6, Pigment Yellow 12 9002-88-4, Sanwax 171P 9010-77-9, Acrylic acid-ethylene copolymer 25053-53-6, ELVAX-II 5610 25068-63-7, **Glycidyl** methacrylate-lauryl methacrylate-methacrylic acid-methyl methacrylate copolymer 27401-06-5, Methacrylic acid-stearyl methacrylate copolymer 28851-51-6, **Glycidyl** methacrylate-lauryl methacrylate copolymer 55492-07-4, Butyl methacrylate-**glycidyl** methacrylate-styrene copolymer 188827-55-6, Acrylamide-**glycidyl** methacrylate-lauryl methacrylate copolymer 188827-56-7 188827-57-8 188827-58-9, Sodium methacrylate-stearyl methacrylate copolymer 188827-59-0, Acrylic acid-ethyl acrylate-ethylene-vinyltoluene copolymer  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**electrophotog**. developer contg. **toner** particles having shapes of combination of globular, fibrous, and amorphous)

AN 126:270376 CA

TI **Electrophotographic** developer containing **toner** particles having shapes different from each other

IN Tsubushi, Kazuo; Goto, Akihiko; Asami, Takeshi; Mizuno, Kazuyo; Koseki, Akihiro

PA Ricoh Kk, Japan

SO Jpn. Kokai Tokyo Koho, 18 pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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# STN Columbus

PI	JP 09050146	A2	19970218	JP 1996-127858	19960424
				JP 1995-123154	A 19950424
				JP 1995-155523	A 19950531

## PATENT FAMILY INFORMATION:

FAN 126:124730

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08292610	A2	19961105	JP 1995-123156	19950424
	US 5851717	A	19981222	US 1996-637081	19960424
				JP 1995-123156	A 19950424
				JP 1995-155523	A 19950531

L35 ANSWER 18 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

TI Preparation of printing plates by **electrophotography** with high image qualities in the plates and prints

AB . . . prepd. by placing a peelable first transfer layer of mainly resins that can be removed by chem. reaction; forming an **electrophotog. toner** image on the above layer; transferring the **toner** image to first receptor [by (i) forming peelable second transfer layer contg. mainly the above resins then transferring the **toner** image together with the transfer layer to the first receptor; or (ii) transferring the **toner** image together with the first transfer layer on to the receptor having peelable second transfer layer of mainly the above resins]; transferring the **toner** image together with the first transfer layer to final receptor becoming lithog.-printable hydrophilic surface during printing; then removing second transfer. . .

ST printing plate manuf **electrophotog.**; peelable transfer printing plate

IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (di-Me, carboxy-terminated; prepn. of printing plates by **electrophotog.** with high image qualities in the plates and prints)

IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (di-Me, hydroxy-terminated; prepn. of printing plates by **electrophotog.** with high image qualities in the plates and prints)

IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ester group-contg.; prepn. of printing plates by **electrophotog.** with high image qualities in the plates and prints)

IT **Electrophotography**  
 Parting materials  
 Printing plates  
 (prepn. of printing plates by **electrophotog.** with high image qualities in the plates and prints)

IT Polysiloxanes, uses  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (prepn. of printing plates by **electrophotog.** with high image qualities in the plates and prints)

IT 65697-22-5P, Acrylic acid-benzyl methacrylate copolymer 150624-67-2P  
 150624-77-4P 150624-89-8P 150625-22-2P 155292-83-4P 155292-84-5P  
 155292-85-6P 155292-86-7P 155292-87-8P 155292-88-9P 155292-90-3P  
 155292-96-9P 157966-19-3P 166594-77-0P, Acrylic acid-benzyl methacrylate-2-methoxyethyl methacrylate copolymer 169045-58-3P  
 169045-60-7P, Acrylic acid-benzyl methacrylate-2-butoxyethyl methacrylate copolymer 169045-63-0P, Acrylic acid-methyl methacrylate-2-propoxyethyl methacrylate copolymer 169045-71-0P 169045-72-1P 169045-73-2P  
 169045-75-4P 169045-77-6P 169045-78-7P 169045-81-2P 169045-82-3P

## STN Columbus

169045-83-4P 169045-84-5P 169045-87-8P 169045-93-6P 169045-95-8P  
 169045-97-0P 169045-98-1P 169046-25-7P 169046-26-8P 169046-28-0P  
 169046-29-1P 169046-30-4P 169046-32-6P 169218-33-1P 176762-50-8P,  
 Crotonic acid-vinyl acetate-vinyl valerate copolymer 176762-52-0P,  
 2,3-Dipropoxycarbonylpropyl methacrylate-methyl methacrylate-2-sulfoethyl  
 methacrylate copolymer 176762-54-2P 176762-62-2P 176762-63-3P  
 176762-65-5P 176762-66-6P 176771-17-8P 176771-19-0P 176771-21-4P  
 176771-22-5P 176771-23-6P 183317-12-6P 183317-16-0P, Acrylic  
 acid-dimethylsilanediol-methyl methacrylate-2-pentyloxyethyl methacrylate  
 graft copolymer 183317-19-3P 183317-21-7P 183317-24-0P  
 183317-25-1P 183317-26-2P 183317-27-3P 183317-28-4P 183317-29-5P  
 183317-31-9P **183317-32-0P** 183317-33-1P 183317-36-4P  
 183317-61-5P 183317-62-6P 183317-63-7P 183317-74-0P 183371-63-3P  
 186094-45-1P 186094-46-2P 186094-47-3P 186094-48-4P 186094-59-7P  
 186094-60-0P 186094-61-1P 186094-62-2P 186094-63-3P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (prepn. of printing plates by **electrophotog.** with high image  
 qualities in the plates and prints)  
 IT 26590-46-5, Ethylene-methacrylic acid-methyl methacrylate copolymer  
 31900-57-9D, Dimethylsilanediol homopolymer, dimethylvinylsilyl-terminated  
 53192-53-3, **Glycidyl** methacrylate-methyl acrylate-methyl  
 methacrylate copolymer 59942-04-0D, dimethylvinylsilyl-terminated  
 65697-21-4D, Benzyl methacrylate-methacrylic acid copolymer,  
 carboxyethylthio-terminated 156118-35-3, Dimethylsilanediol-  
 methylsilanediol copolymer 156618-33-6 176762-96-2, Acrylic  
 acid-benzyl methacrylate-2-propoxyethyl methacrylate copolymer  
 176771-25-8 182559-23-5 182559-29-1 182559-31-5 183317-48-8  
 183317-51-3 183317-53-5 183317-55-7 183317-56-8 183317-58-0  
 186094-50-8 186094-52-0 186094-53-1 186094-54-2 186094-55-3  
 186094-56-4 186094-57-5 186094-58-6  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material  
 use); USES (Uses)  
 (prepn. of printing plates by **electrophotog.** with high image  
 qualities in the plates and prints)  
 IT 162127-42-6, X-22-167B 163916-20-9 163916-21-0  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (prepn. of printing plates by **electrophotog.** with high image  
 qualities in the plates and prints)  
 AN 126:124741 CA  
 TI Preparation of printing plates by **electrophotography** with high image  
 qualities in the plates and prints  
 IN Kato, Eiichi; Nakazawa, Jusuke  
 PA Fuji Photo Film Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 89 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08292611	A2	19961105	JP 1996-36726	19960223
			JP 1995-60079	A 19950224
US 5648191	A	19970715	US 1996-605440	19960222
			JP 1995-60079	A 19950224

L35 ANSWER 19 OF 44 CA COPYRIGHT 2005 ACS on STN  
Full Text  
 TI Photosensitive substance for **electrophotography**, **electrophotographic**  
 photoreceptor and its manufacture, and color filter and its manufacture  
 using it  
 AB . . . vinyl compd., a CO<sub>2</sub>H-contg. vinyl compd., and a OH-contg. vinyl

# STN Columbus

compd.. The copolymer may be prepd. by use of an **epoxy** ring-contg. vinyl compd. in place of the OH-contg. or CO<sub>2</sub>H-contg. vinyl compd. The photoreceptor comprises a substrate with a coating. . . to the light-insulating or colored pixel pattern to form a latent image, and developing the image with a liq. developing **toner**. Color filters with good solvent-resistance can be manufd. by **electrophotog.** process. Thus, N-vinylcarbazole-Bu methacrylate-acrylic acid-2-hydroxyethyl methacrylate copolymer was used for the photosensitive substance.

ST **electrophotog** photoreceptor photoconductive vinyl copolymer; electrodeposition vinyl copolymer photoreceptor manuf; color filter **electrophotog** photoreceptor

IT **Electrophotographic** photoconductors (photoreceptors)  
Optical filters  
(**electrophotog.** photoreceptor contg. photoconductive vinyl copolymer for color filters)

IT Electrodeposition  
(**electrophotog.** photoreceptor contg. photoconductive vinyl copolymer manufd. by electrodeposition)

IT 185031-85-0P 185031-86-1P 185031-87-2P  
185031-88-3P 185031-89-4P  
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)  
(**electrophotog.** photoreceptor contg. photoconductive vinyl copolymer for color filters)

AN 126:52821 CA

TI Photosensitive substance for **electrophotography**, **electrophotographic** photoreceptor and its manufacture, and color filter and its manufacture using it

IN Sasaki, Atsushi; Watanabe, Eizaburo; Ike, Nobuaki; Fujita, Kenichi

PA Toppan Printing Co Ltd, Japan; Toyo Ink Mfg Co

SO Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08262766	A2	19961011	JP 1995-63131	19950322
				JP 1995-63131	19950322

L35 ANSWER 20 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

TI Resin composition for **electrophotographic toner**

AB . . . ≤100,000 dyne/cm<sup>2</sup> at 170°, where (A) contains a nitrile-group-contg. polymer. The compn. is esp. suitable as a binder resin for **electrophotog.** dry **toner**.

ST resin compn **electrophotog toner**

IT **Epoxy** resins, uses  
Polyamides, uses  
Polyesters, uses  
Urethane polymers, uses  
RL: DEV (Device component use); USES (Uses)  
(resin compn. for **electrophotog.** **toner** comprising)

IT **Electrophotographic** developers  
(toners, resin compn. for **electrophotog.** **toner** with specific dynamic elastic modulus)

IT 9010-79-1, Viscol 550P 25153-46-2, 2-Ethylhexylacrylate-styrene copolymer 26282-37-1, Acrylonitrile-2-ethylhexylacrylate-styrene copolymer 35725-18-9, Acrylonitrile-lauryl methacrylate-styrene copolymer 52907-82-1, Benzoic acid-Epicote 1002 copolymer 89993-85-1, Propoxylated bisphenol A-isophthalic acid copolymer 97697-76-2, Ethoxylated bisphenol A-terephthalic acid copolymer 130038-55-0,

# STN Columbus

MDI-ethoxylated bisphenol A copolymer 138128-04-8, Propoxylated bisphenol A-dodecenylsuccinic acid-terephthalic acid copolymer 183243-85-8, Acrylic acid-acrylonitrile-lauryl methacrylate-styrene copolymer

RL: DEV (Device component use); USES (Uses)  
(resin compn. for **electrophotog. toner** comprising)

AN 125:312400 CA  
TI Resin composition for **electrophotographic toner**  
IN Niinae, Takashi; Sasada, Shinya  
PA Sanyo Chemical Industries Ltd., Japan  
SO Ger. Offen., 13 pp.  
CODEN: GWXXBX  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 19608712	A1	19960919	DE 1996-19608712	19960306
				JP 1995-74565	A 19950306
	JP 08305081	A2	19961122	JP 1996-69286	19960228
	JP 2906034	B2	19990614		
				JP 1995-74565	A 19950306
	CN 1133443	A	19961016	CN 1996-102711	19960301
				JP 1995-74565	A 19950306
	FR 2731529	A1	19960913	FR 1996-2830	19960306
	FR 2731529	B1	19981127		
				JP 1995-74565	A 19950306
	US 5714542	A	19980203	US 1996-611821	19960306
				JP 1995-74565	A 19950306

L35 ANSWER 21 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

TI Manufacture of lithographic printing plate by **electrophotographic** process  
AB The process comprises forming a **toner** image on a peelable **electrophotog.** photoreceptor by using an **electrophotog.** process, electrodepositing a layer made up of 22 types of resin particles with different Tg (glass transition temp.) on the **toner** image to form a 1st transfer layer, applying a layer made up of resin particles with a higher Tg to form a 2nd transfer layer, transferring the **toner** image and the 1st and 2nd transfer layers to a receptor, and removing the 1st and 2nd transfer layers in. . .  
ST lithog printing plate **electrophotog** process manuf; resin particle lithog printing plate  
IT **Electrophotography**  
Lithographic plates  
(manuf. of lithog. printing plate by **electrophotog.** process)  
IT Siloxanes and Silicones, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(manuf. of lithog. printing plate by **electrophotog.** process)  
IT 182829-01-2  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
(binder resin; manuf. of lithog. printing plate by **electrophotog.** process)  
IT 25639-21-8D, thioethoxycarbonyl ethyl methacrylate terminated 29014-80-0, Dodecyl methacrylate- methacrylic acid copolymer 182558-54-9 182558-79-8  
RL: MOA (Modifier or additive use); USES (Uses)  
(dispersion stabilizing resin; manuf. of lithog. printing plate by **electrophotog.** process)  
IT 67923-67-5, Acrylic acid-ethyl acrylatemethyl acrylate-methyl methacrylate copolymer

# STN Columbus

RL: NUU (Other use, unclassified); USES (Uses)  
(dispersion stabilizing resin; manuf. of lithog. printing plate by **electrophotog.** process)

IT 3052-61-7, Benzyl-N,N-diethylthiocarbamate 109473-77-0 155293-25-7  
RL: MOA (Modifier or additive use); USES (Uses)  
(initiator; manuf. of lithog. printing plate by **electrophotog.** process)

IT 150551-83-0 150551-90-9 150551-91-0 150551-93-2 158320-07-1  
182558-56-1 182558-84-5D, thioethoxycarbonylaminoethyl methacrylate terminated  
RL: MOA (Modifier or additive use); USES (Uses)  
(manuf. of lithog. printing plate by **electrophotog.** process)

IT 166594-77-0, Acrylic acid- benzyl methacrylate- 2-methoxyethyl methacrylate copolymer  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
(manuf. of lithog. printing plate by **electrophotog.** process)

IT 25035-26-1, Crotonic acid-vinyl acetate-vinyl propionate copolymer  
25766-25-0, Vinyl acetate- vinyl butanoate- crotonic acid copolymer  
27155-22-2, Acrylic acidmethyl acrylatemethyl methacrylate copolymer  
30475-53-7D, Methacrylic acidphenyl methacrylate copolymer, carboxy-terminated **40045-04-3**, Acrylic acid-ethyl methacrylate-**glycidyl** methacrylate copolymer 65697-21-4D, Benzyl methacrylate; methacrylic acid copolymer, carboxy-terminated  
155161-71-0, Acrylic acid-benzyl methacrylate-methyl methacrylate copolymer 155161-74-3, Benzyl methacrylate-**glycidyl** methacrylate-methacrylic acid copolymer 166594-75-8D, thioethylmethacrylate terminated 172598-64-0 **182558-57-2**, Acrylic acid-2-butoxyethyl methacrylate-crotonic acid-methyl methacrylate-vinyl acetate-vinyl propionate copolymer 182558-58-3  
182559-23-5 182559-26-8, Methyl methacrylate-acrylic acid-2-sulfoethyl methacrylate copolymer 182559-29-1 182559-31-5 182559-33-7  
182559-34-8 182559-35-9 182559-36-0 182559-37-1  
RL: NUU (Other use, unclassified); USES (Uses)  
(manuf. of lithog. printing plate by **electrophotog.** process)

IT 26936-24-3, Methyl acrylatemethyl methacrylate-methacrylic acid copolymer  
73248-83-6, 2,2,3,4,4,4-Hexafluorobutyl methacrylate-methyl methacrylate copolymer 130030-47-6, Acrylic acid-benzyl methacrylate-ethyl acrylate copolymer 150624-89-8 157966-19-3 161552-54-1 169046-28-0  
169046-29-1 169046-30-4 169046-32-6 182558-60-7 182558-61-8, Acrylic acid-2-carboxyethyl acrylate-methyl acrylate-methyl methacrylate copolymer 182558-63-0 182558-65-2, Acrylic acid-2-butoxyethyl acrylate-ethyl methacrylate-methyl methacrylate-2-hydroxyethyl acrylate copolymer 182558-67-4 182558-68-5 182558-69-6 182558-71-0  
182558-73-2 182558-75-4 182558-76-5 182558-78-7 182558-80-1  
182558-81-2D, thioethoxycarbonylethyl methacrylate terminated  
182558-82-3D, thioethylmethacrylate terminated 182558-83-4D, 3-cyanobutanoyloxyethyl acrylate terminated 182558-85-6, Acrylic acid-2-ethoxyethyl acrylate-methyl acrylate copolymer 182558-86-7  
182558-87-8 182558-88-9 182558-89-0 182558-90-3 182558-91-4  
182558-92-5 182558-93-6 182558-94-7 182558-95-8 182558-97-0  
182558-99-2 182559-02-0 182559-04-2 182559-12-2 182559-14-4  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
(manuf. of lithog. printing plate by **electrophotog.** process)

IT 25135-39-1P, Acrylic acid-ethyl acrylatemethyl methacrylate copolymer  
25302-81-2P, Acrylic acid-methyl acrylate copolymer 58991-34-7P  
155161-64-1P, Acrylic acid- diethylene glycol monomethyl ether methacrylate- methyl methacrylate copolymer 169045-58-3P, 2-Carboxyethyl acrylate-methyl acrylate-methyl methacrylate copolymer 169045-70-9P  
182558-59-4P 182558-62-9P, Acrylic acid-2-methoxyethyl acrylate-methyl acrylate-methyl methacrylate-methacrylic acid copolymer 182558-64-1P,

## STN Columbus

Acrylic acid-ethyl methacrylate-2-hydroxyethyl acrylate copolymer

182558-66-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(manuf. of lithog. printing plate by **electrophotog.** process)

AN 125:288810 CA  
 TI Manufacture of lithographic printing plate by **electrophotographic** process  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co Ltd, Japan  
 SO Jpn. Kokai Tokyo Koho, 79 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 08194341	A2	19960730	JP 1995-19897	19950113
				JP 1995-19897	19950113

L35 ANSWER 22 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

TI **Electrophotographic** color imaging method  
 AB The title method utilizes colorless transparent **toner** comprising colorless polymeric binder and colorless polymeric charge controller. The **toner** is pos.-charging liq. **toner** and its binder is a graft-mixed-polymer with claimed vinyl monomers. The method produced high quality images.  
 ST color **electrophotog** method **toner** graft polymer  
 IT **Electrophotographic** development  
 (color, **electrophotog.** color imaging method)  
 IT **Electrophotographic** developers  
 (color, toners, **electrophotog.** color imaging method)  
 IT 180311-52-8P, 2-Ethylhexyl methacrylate-**glycidyl** methacrylate-methacrylic acid-methyl acrylate-methyl methacrylate-N-vinyl-2-pyrrolidone graft copolymer 180311-53-9P, 2-Ethylhexyl methacrylate-**glycidyl** methacrylate-methacrylic acid-methyl acrylate-methyl methacrylate-4-vinylpyridine graft copolymer  
 RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)  
 (binder resin of **electrophotog. toner**)  
 IT 31196-82-4P, Lauryl methacrylate-methyl methacrylate-N-vinylpyrrolidone copolymer 34888-27-2P, 2-Hydroxyethyl methacrylate-lauryl methacrylate copolymer  
 RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)  
 (charge controller of **electrophotog. toner**)

AN 125:181177 CA  
 TI **Electrophotographic** color imaging method  
 IN Faust, Raimund Josef; Lutz, Silvia  
 PA Hoechst A.-G., Germany  
 SO Eur. Pat. Appl., 17 pp.  
 CODEN: EPXXDW

DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 720067	A1	19960703	EP 1995-120267	19951221
	EP 720067	B1	19990915		
	R: AT, BE, DE, ES, FR, GB, IT, NL				
				DE 1994-4447104	A 19941229
	DE 4447104	A1	19960704	DE 1994-4447104	19941229

# STN Columbus

US 5700618	A	19971223	US 1995-579434	19951227
			DE 1994-4447104	A 19941229
JP 08254859	A2	19961001	JP 1995-343827	19951228
			DE 1994-4447104	A 19941229
BR 9506125	A	19971223	BR 1995-6125	19951228
			DE 1994-4447104	A 19941229

L35 ANSWER 23 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

TI Preparation of durable printing plates by **electrophotography**

AB The title prepn. involves forming a first transfer layer by electrodeposition, on **electrophotog.** photoreceptor, of resin particles contg. polymers (A) with Tg 10-140° and softening point 35-180° and also polymers with Tg ≤45°. . . and softening point ≤60° which are ≥2° lower than those of the polymers A then a second transfer layer then **electrophotog. toner** images, transfer of the **toner** image together with the transfer layers on a receptor, and chem. removing the transfer layers.

ST printing plate **electrophotog**

IT **Electrophotography**  
Parting materials  
Printing plates  
(prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(aminoalkyl di-Me, release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(carboxy-contg., release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, 3-hydroxypropyl Me, ethoxylated, release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, carboxy-terminated, release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, **epoxy**-contg., XF 42A5041, release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, hydroxy-terminated, release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, hydroxyalkyl Me, ethoxylated, release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, hydroxyalkyl Me, ethoxylated propoxylated, release; prepn. of durable printing plates by **electrophotog.**)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, hydroxyalkyl Me, propoxylated, release; prepn. of durable printing plates by **electrophotog.**)

IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fluorine-contg., release; prepn. of durable printing plates by

## STN Columbus

**electrophotog.)**

IT Fluoropolymers  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polyoxyalkylene-, release; prepn. of durable printing plates by **electrophotog.)**

IT Polymerization catalysts  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (star-block, prepn. of durable printing plates by **electrophotog**  
 .)

IT 109473-77-0P 150551-83-0P 150551-84-1P 150551-90-9P 150551-93-2P  
 155293-25-7P 176771-24-7P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (polymn. initiator; prepn. of durable printing plates by  
**electrophotog.)**

IT 25035-26-1P, Crotonic acid-vinyl acetate-vinyl propionate copolymer  
 26936-24-3P, Methacrylic acid-methyl acrylate-methyl methacrylate  
 copolymer 61255-17-2P, Divinylbenzene-dodecyl methacrylate copolymer  
 150624-67-2P 150624-77-4P 150625-22-2P 150642-13-0P 155292-83-4P  
 155292-84-5P 155292-85-6P 155292-88-9P 155292-90-3P 161512-62-5P  
 166594-77-0P 169045-70-9P 169046-26-8P 169046-28-0P 169046-29-1P  
 169046-30-4P 169046-32-6P 176770-75-5P 176770-76-6P  
 176770-78-8P 176770-79-9P 176770-80-2P 176770-81-3P  
 176770-82-4P 176770-83-5P 176770-84-6P 176770-86-8P 176770-87-9P  
 176770-88-0P 176770-89-1P 176770-90-4P 176770-91-5P 176770-92-6P  
 176770-93-7P 176770-94-8P 176770-95-9P 176770-96-0P 176770-97-1P  
 176770-98-2P 176770-99-3P 176771-00-9P 176771-01-0P  
**176771-02-1P** 176771-03-2P 176771-05-4P 176771-06-5P  
 176771-07-6P 176771-08-7P 176771-09-8P 176771-10-1P 176771-11-2P  
 176771-13-4P 176771-14-5P 176771-15-6P 176771-16-7P 176771-17-8P  
 176771-18-9P 176771-19-0P 176771-20-3P 176771-21-4P 176771-22-5P  
 176771-23-6P 176896-13-2P 177568-58-0P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (prepn. of durable printing plates by **electrophotog.)**

IT 25766-25-0 155161-49-2 176771-26-9 176771-27-0 176771-28-1  
 176771-29-2 176771-31-6 176771-32-7 176771-34-9 176771-35-0  
 176771-36-1 176771-37-2 176771-38-3 177367-34-9  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (prepn. of durable printing plates by **electrophotog.)**

IT 91105-71-4, Surflon S-382 144070-79-1 162127-42-6, X-22-167B  
 163916-20-9 163916-24-3 163916-27-6 176771-25-8 176771-39-4  
 176771-40-7 176896-14-3  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (release; prepn. of durable printing plates by **electrophotog**  
 .)

IT 150624-89-8P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (star; prepn. of durable printing plates by **electrophotog.)**

AN 125:22364 CA  
 TI Preparation of durable printing plates by **electrophotography**  
 IN Kato, Eiichi; Momota, Atsushi; Ooishi, Hiroyuki  
 PA Fuji Photo Film Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 82 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 08069135	A2	19960312	JP 1995-154934	19950621

# STN Columbus

US 5589308	A	19961231	JP 1994-160779	A	19940621
			US 1995-492701		19950620
			JP 1994-160779	A	19940621

L35 ANSWER 24 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

- TI Apparatus and method for preparation of printing plate by **electrophotographic** process
- AB A method for prepn. of a printing plate by an **electrophotog.** process comprises forming a **toner** image on an **electrophotog.** light-sensitive element by an **electrophotog.** process, providing a peelable transfer layer mainly contg. a resin capable of being removed upon a chem. reaction treatment on the **toner** image, transferring the **toner** image together with the transfer layer from the light-sensitive element to a receiving material having a surface capable of providing. . . the non-image area by the chem. reaction treatment. According to the method, good duplicated images are formed without taking the **electrophotog.** characteristics of transfer layer used into consideration. The transfer layer is excellent in transferability and can be achieved. A conventional **electrophotog.** light-sensitive element can be utilized by applying a compd. for imparting the desired releasability to the surface thereof. An app.. . .
- ST printing plate prepn **electrophotog** process
- IT Rubber, silicone, uses  
 RL: DEV (Device component use); USES (Uses)  
 (surface active agent on **electrophotog.** light-sensitive element comprising)
- IT **Electrophotography**  
 (app., method for prepn. of printing plate by **electrophotog.** process and app. for use therein)
- IT Siloxanes and Silicones, uses  
 RL: DEV (Device component use); USES (Uses)  
 (carboxy-contg., surface active agent on **electrophotog.** light-sensitive element comprising)
- IT Siloxanes and Silicones, uses  
 RL: DEV (Device component use); USES (Uses)  
 (di-Me, 3-hydroxypropyl Me, ethoxylated, surface active agent on **electrophotog.** light-sensitive element comprising)
- IT Siloxanes and Silicones, uses  
 RL: DEV (Device component use); USES (Uses)  
 (di-Me, carboxy-terminated, surface active agent on **electrophotog.** light-sensitive element comprising)
- IT Siloxanes and Silicones, uses  
 RL: DEV (Device component use); USES (Uses)  
 (di-Me, hydroxy-terminated, surface active agent on **electrophotog.** light-sensitive element comprising)
- IT Lithographic plates  
 (offset, method for prepn. of printing plate by **electrophotog** . process and app. for use therein)
- IT 80-62-6DP, polymer with fluoroalkyl-Et methacrylate and **glycidyl** methacrylate 97-63-2DP, polymer with fluoroalkyl-Et methacrylate and **glycidyl** methacrylate 106-91-2DP, polymer with fluoroalkyl-Et methacrylate and (M)ethyl methacrylate 123109-43-3P 144541-84-4P  
 150624-67-2P 150625-01-7P 150625-03-9P 150625-22-2P 150642-22-1P  
 150642-24-3P 155292-83-4P 155292-86-7P 155292-87-8P 155292-88-9P  
 155292-90-3P 155292-98-1P 157966-19-3P 161552-47-2P 161552-54-1P  
 172835-14-2DP, polymer with fluoroalkyl-Et methacrylate 172835-66-4P  
 172835-67-5P 172835-68-6P 172835-69-7P 172835-70-0P 172835-71-1P  
 172835-72-2P  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (binder resins comprising)
- IT 42557-10-8, KF 96L2.0 58258-12-1 82030-84-0, Surflon S 141

# STN Columbus

162127-42-6, X 22-167B 163916-21-0 172835-87-9D, trimethylsilyl-terminated  
 RL: DEV (Device component use); USES (Uses)  
 (surface active agent on **electrophotog.** light-sensitive element comprising)

IT 172835-15-3P 172835-17-5P 172835-18-6P 172835-19-7P 172835-20-0P  
 172835-21-1P 172835-22-2P 172835-23-3P 172835-24-4P  
 172835-25-5P 172835-27-7P 172835-29-9P 172835-31-3P 172835-32-4P  
 172835-33-5P 172835-34-6P 172835-35-7P 172835-36-8P 172835-37-9P  
 172835-38-0P 172835-39-1P 172835-40-4P 172835-42-6P  
 172835-43-7P 172835-44-8P 172835-45-9P 172835-46-0P 172835-47-1P  
 172835-49-3P  
 RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
 (thermoplastic resin grain for transfer layer comprising)

AN 124:101890 CA  
 TI Apparatus and method for preparation of printing plate by **electrophotographic** process  
 IN Kato, Eiichi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO Eur. Pat. Appl., 147 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 679957	A1	19951102	EP 1995-106212	19950425
	EP 679957	B1	20000315		
	R: DE, GB				
	US 5561014	A	19961001	JP 1994-110198	A 19940427
				US 1995-426740	19950421
				JP 1994-110198	A 19940427
	JP 08015925	A2	19960119	JP 1995-125592	19950427
				JP 1994-110198	A 19940427

L35 ANSWER 25 OF 44 CA COPYRIGHT 2005 ACS on STN  
Full Text  
 TI Magnetic **toner** and image formation  
 AB The title **toner** contains a magnetic substance and a graft copolymer prepd. by treatment of R1(SiMe2O)nSiMe2R2 (R1 = OH, NH2, CO2H, **epoxy**, methacryl, SH, phenol; R2 = OH, NH2, CO2H, **epoxy**, methacryl, SH, phenol, Me; n = 3-300) of no. av. mol. wt. (Mn) 500-20,000 with a vinyl polymer having functional. . . the step of developing electrostatic latent images formed on a latent image-holding substance by forming a thin layer of the **toner** on a **toner**-carrying substance. The **toner** is useful in developing process including the thin layer formation and provides high-d. images without fog in continuously repeated copying. . . and acrylic acid were copolymd. in the presence of styrene-Me methacrylate-Bu methacrylate copolymer, and the resulting polymer was treated with **glycidyl**-terminated di-Me siloxane I (Mn 1000) to give a graft copolymer. The graft copolymer, magnetite, salicylic acid-Cr complex, and polypropylene were kneaded, pulverized, and mixed with SiO2 to give a magnetic **toner**.  
 ST **electrophotog toner** magnetic graft siloxane; polyvinyl grafted siloxane **electrophotog toner**  
 IT Magnetic substances  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (**electrophotog.** toners contg. vinyl polymer-grafted siloxanes and magnetic substances)  
 IT Siloxanes and Silicones, properties

## STN Columbus

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (di-Me, acrylic, graft, **electrophotog.** toners contg. vinyl polymer-grafted siloxanes and magnetic substances)

IT **Electrophotographic** developers  
 (toners, **electrophotog.** toners contg. vinyl polymer-grafted siloxanes and magnetic substances)

IT 26634-89-9DP, Butyl methacrylate-methyl methacrylate-styrene copolymer, reaction products with **glycidyl**- or hydroxy-terminated siloxanes  
 31900-57-9DP, Dimethylsilanediol homopolymer, **glycidyl**- or hydroxy-terminated, reaction products with carboxyl- or hydroxy-contg. polymethacrylates **65595-71-3DP**, reaction products with **glycidyl**- or hydroxy-terminated siloxanes 72356-26-4DP, reaction products with **glycidyl**- or hydroxy-terminated siloxanes  
 161685-56-9DP, reaction products with carboxyl- or hydroxy-contg. polymethacrylates 161685-57-0DP, reaction products with carboxyl- or hydroxy-contg. polymethacrylates  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (**electrophotog.** toners contg. vinyl polymer-grafted siloxanes and magnetic substances)

IT 1309-38-2, Magnetite (Fe<sub>3</sub>O<sub>4</sub>), properties  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (**electrophotog.** toners contg. vinyl polymer-grafted siloxanes and magnetic substances)

AN 122:201216 CA  
 TI Magnetic **toner** and image formation  
 IN Yamane, Kenji; Akimoto, Kunio; Endo, Isao; Kitahara, Kenichi  
 PA Konishiroku Photo Ind, Japan  
 SO Jpn. Kokai Tokyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 06301235	A2	19941028	JP 1993-84707	19930412
				JP 1993-84707	19930412

L35 ANSWER 26 OF 44 CA COPYRIGHT 2005 ACS on STN  
Full Text

AB . . . copolymer of a terminal-reactive silicone oil with no. av. mol. wt. (Mn) 500-20,000 R<sub>1</sub>(SiMe<sub>2</sub>O)<sub>n</sub>SiMe<sub>2</sub>R<sub>2</sub> [I; R<sub>1</sub> = OH, NH<sub>2</sub>, CO<sub>2</sub>H, **epoxy**, methacryl, SH, phenol, these groups may link via C1-6 alkylene chains; R<sub>2</sub> = same as R<sub>1</sub> (both terminal-reactive) or Me. . . styrene-Me methacrylate-Bu methacrylate copolymer to give a polymer having 2 mol. wt. peaks. A graft copolymer of I (R<sub>1</sub> = **epoxy**, R<sub>2</sub> = Me; Mn 1000) with the polymer, carbon black, and waxes were kneaded, pulverized, and mixed with SiO<sub>2</sub> to give a **toner**, which was mixed with a ferrite carrier to give a developer.

ST **toner** silicone oil graft copolymer; vinyl polymer silicone graft copolymer; binder resin **toner electrophotog**

IT Siloxanes and Silicones, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (**electrophotog. toner** contg.-graft copolymer of silicone and vinyl compds.)

IT **Electrophotographic** developers  
 (toners, **electrophotog. toner** contg.-graft copolymer of silicone and vinyl compds.)

IT 161717-05-1P 161717-06-2P  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material

# STN Columbus

use); PREP (Preparation); USES (Uses)  
(**electrophotog. toner** contg.-graft copolymer of  
silicone and vinyl compds.)

AN 122:201188 CA  
TI Toners for developing electrostatic images  
IN Akimoto, Kunio; Endo, Isao; Yamane, Kenji; Kitahara, Kenichi  
PA Konishiroku Photo Ind, Japan  
SO Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 06289650	A2	19941018	JP 1993-75830	19930401
				JP 1993-75830	19930401

L35 ANSWER 27 OF 44 CA COPYRIGHT 2005 ACS on STN

Full Text

TI **Electrophotographic toner** containing **glycidyl**-crosslinked resin  
binder and its manufacture

AB The **toner** contains a coloring agent, a charge-controlling agent, and a  
binder comprising (A) a CO<sub>2</sub>H-contg. vinyl resin with no. av. mol. wt.  
1000-20,000, acid value 5.0-100, and glass transition temp. 40-75°  
and a **glycidyl** compd. with **glycidyl** content 0.05-1.0 equiv for 1 equiv  
CO<sub>2</sub>H group in the resin. The **toner** is manufd. by melt kneading a  
coloring agent, a charge-controlling agent, and a binder to crosslink a  
CO<sub>2</sub>H-contg. vinyl resin and a **glycidyl** compd. as the binder and  
crushing. The **toner** showed high resoln. and good durability.

ST **electrophotog toner glycidyl** crosslinked resin binder

IT **Epoxy** resins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(binder; **electrophotog. toner** contg.  
**glycidyl**-crosslinked vinyl resin binder with high resoln.)

IT **Electrophotographic** developers  
(toners, **electrophotog. toner** contg.  
**glycidyl**-crosslinked vinyl resin binder with high resoln.)

IT 55537-10-5P 161044-15-1P 161044-16-2P  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(binder; **electrophotog. toner** contg.  
**glycidyl**-crosslinked vinyl resin binder with high resoln.)

IT 79-06-1D, Acrylamide, **epoxy** resins 79-10-7D, Acrylic acid,  
**epoxy** resins 79-39-0D, Methacrylamide, **epoxy** resins  
79-41-4D, Methacrylic acid, **epoxy** resins 107-13-1D,  
Acrylonitrile, **epoxy** resins 108-31-6D, Maleic anhydride,  
**epoxy** resins 110-16-7D, Maleic acid, **epoxy** resins  
110-17-8D, Fumaric acid, **epoxy** resins 621-82-9D, Cinnamic  
acid, **epoxy** resins  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**electrophotog. toner** contg. **glycidyl**  
-crosslinked vinyl resin binder with high resoln.)

AN 122:147205 CA  
TI **Electrophotographic toner** containing **glycidyl**-crosslinked resin  
binder and its manufacture

IN Hata, Masaaki; Uchama, Kenji; Okada, Yasuo  
PA Mitsui Toatsu Chemicals, Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

# STN Columbus

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 06222612	A2	19940812	JP 1993-8980	19930122
				JP 1993-8980	19930122

L35 ANSWER 28 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

TI **Electrophotographic** manufacture of lithographic plate

AB The title manuf. comprises the steps of forming an **electrophotog.** **toner** image on a strippable transfer layer based on a chem. removable thermoplastic resin (e.g., by dissoln. with an aq. alkali soln.) and formed on the releasable surface of an **electrophotog.** photoreceptor, thermally transfer the **toner** image along with the transfer layer to a receptor whose surface is capable of becoming hydrophilic for lithog. printing, and. . . of the receptor support such as an Al support and save the thermoplastic resin of the transfer layer at the **toner** image area as a printing image of a lithog. plate). The invention, also suited for laser scanning exposure, provides durable. . .

ST lithog plate **electrophotog** manuf; **electrophotog** transfer layer lithog plate; photoreceptor **electrophotog** thermal transfer layer

IT Lithographic plates  
(**electrophotog.** manuf. of, using releasable photoreceptor and strippable transfer layer)

IT Fluoropolymers  
Siloxanes and Silicones, uses  
RL: PREP (Preparation)  
(latex, prepn. and use of, as releasable component for **electrophotog.** photoreceptor)

IT 26936-30-1, Methyl methacrylate-3-(trimethoxysilyl)propyl methacrylate copolymer  
RL: USES (Uses)  
(binders, **electrophotog.** photoreceptor with overcoating layer contg.)

IT 25086-15-1, Methacrylic acid-methyl methacrylate copolymer 25133-97-5, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer 40045-03-2, Ethyl methacrylate-**glycidyl** methacrylate-2-hydroxyethyl methacrylate copolymer 155247-40-8 155247-42-0 157859-84-2 157859-86-4 157859-87-5 157859-88-6 157859-90-0 157859-91-1  
RL: USES (Uses)  
(binders, **electrophotog.** photosensitive layer contg., for lithog. plate)

IT 94-36-0, Benzoyl peroxide, uses 97-90-5 110-63-4, 1,4-Butanediol, uses 124-09-4, 1,6-Hexanediamine, uses 83512-67-8, Burnock D 500  
RL: MOA (Modifier or additive use); USES (Uses)  
(crosslinking agent, **electrophotog.** photoconductive layer contg., for releasable transfer layer)

IT 2530-83-8  
RL: MOA (Modifier or additive use); USES (Uses)  
(crosslinking agent, **electrophotog.** photoreceptor with overcoating layer from compn. contg.)

IT 57-55-6, 1,2-Propanediol, uses 85-44-9, 1,3-Isobenzofurandione 111-33-1 526-95-4, Gluconic acid 926-63-6, N, N-Dimethylpropylamine 2224-15-9, Ethylenediglycidyl ether 2550-02-9, Propyltriethoxysilane 27431-62-5 42055-15-2, 3-(N-Methylamino)propanol  
RL: MOA (Modifier or additive use); USES (Uses)  
(crosslinking agent, **electrophotog.** photosensitive layer contg., for lithog. plate)

IT 4074-90-2  
RL: MOA (Modifier or additive use); USES (Uses)  
(crosslinking agent, releasable **electrophotog.** photoconductive layer contg.)

# STN Columbus

IT 77810-16-3 157860-16-7 157860-20-3 157860-21-4 157860-62-3  
 RL: USES (Uses)  
 (electrophotog. photoreceptor having strippable transfer layer contg.)

IT 25189-12-2 26338-06-7, Ethyl acrylate-methacrylic acid-methyl acrylate copolymer 26589-39-9, Methacrylic acid-methyl acrylate copolymer 26936-24-3 27155-22-2 32517-13-8 59213-43-3 65697-21-4 79042-18-5 129636-54-0 140143-08-4 157859-72-8 157859-73-9 157859-74-0 157859-75-1 157859-76-2 157859-77-3 157859-78-4 157859-79-5 157859-80-8 157859-81-9 157859-82-0 157859-92-2 157859-93-3 157859-94-4 157859-95-5 157859-96-6 157859-98-8 157859-99-9 157860-01-0 157860-02-1 157860-04-3 157860-05-4 157860-06-5 157860-08-7 157860-10-1 157860-11-2 157860-12-3 157860-14-5 157860-16-7 157860-18-9 157860-23-6 157860-24-7 157860-25-8 157860-26-9 157860-28-1 157860-30-5 157860-32-7 157860-34-9 157860-36-1 157860-37-2 157860-39-4 157860-40-7 157860-41-8 157860-42-9 157860-43-0 157860-44-1 157860-45-2 157860-46-3 157860-47-4 157860-48-5 157860-49-6 157860-51-0 157860-52-1 157860-53-2 157860-54-3 157860-56-5 157860-58-7 157860-60-1 157860-63-4 157860-65-6 157860-67-8 157960-12-8  
 RL: USES (Uses)  
 (electrophotog. photoreceptor having strippable transfer layer of)

IT 150642-14-1P 155293-00-8P 156658-66-1P 157858-82-7P 157858-83-8P 157858-84-9P 157858-85-0P 157858-86-1P 157858-87-2P 157858-88-3P 157858-89-4P 157858-90-7P 157858-91-8P 157858-92-9P 157858-93-0P 157858-94-1P 157858-95-2P 157858-96-3P 157858-97-4P 157858-98-5P 157858-99-6P 157859-00-2P 157859-01-3P  
 RL: PREP (Preparation)  
 (latex, prepn. and use of, as releasable component for electrophotog. photoreceptor)

IT 157859-02-4P 157859-03-5P 157859-04-6P 157859-05-7P 157859-06-8P 157859-07-9P 157859-08-0P 157859-09-1P 157859-10-4P 157859-11-5P 157859-13-7P 157859-14-8P 157859-15-9P 157859-16-0P 157859-17-1P 157859-18-2P 157859-19-3P 157859-21-7P 157859-23-9P 157859-25-1P 157859-27-3P 157859-28-4P 157859-29-5P 157859-30-8P 157859-32-0P 157859-34-2P 157859-36-4P 157859-38-6P 157859-39-7P 157859-41-1P 157859-43-3P 157859-45-5P 157859-46-6P 157859-48-8P 157859-50-2P 157859-52-4P 157859-55-7P 157859-57-9P 157859-59-1P 157859-61-5P 157859-62-6P 157859-64-8P 157859-67-1P 157859-69-3P 157859-71-7P  
 RL: PREP (Preparation)  
 (latex, prepn. and use of, as thermoplastic resin grains for strippable transfer layer)

IT 79-41-4DP, 2-perfluoroalkylethyl ester, copolymers with 2-hydroxyethyl methacrylate, Et methacrylate, and glycidyl methacrylate 123109-43-3P 144541-84-4P 150624-67-2P 150624-77-4P 150625-01-7P 150625-03-9P 150625-19-7P 150625-22-2P 150642-22-1P 150642-24-3P 155292-83-4P 155292-84-5P 155292-85-6P 155292-86-7P 155292-87-8P 155292-88-9P 155292-90-3P 155292-92-5P 155292-93-6P 155292-94-7P 155292-96-9P 155292-98-1P 155293-26-8P 157966-19-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and use of, as releasable component for electrophotog. photoreceptor, for lithog. plate)

IT 97-63-2DP, Ethyl methacrylate, block copolymers with glycidyl methacrylate and 2-perfluoroalkylethyl methacrylate 106-91-2DP, block copolymers with Et methacrylate and 2-perfluoroalkylethyl methacrylate 868-77-9DP, graft copolymers with 2-perfluoroalkylethyl methacrylate  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and use of, for releasable electrophotog. photoreceptor surface, for lithog. plate)

IT 150624-89-8

# STN Columbus

RL: USES (Uses)  
 (star-block, as releasable component for **electrophotog.**  
 photoreceptor, for lithog. plate)

AN 121:191363 CA  
 TI **Electrophotographic** manufacture of lithographic plate  
 IN Kato, Eiichi; Ohsawa, Sadao; Kasai, Seishi  
 PA Fuji Photo Film Co., Ltd., Japan  
 SO PCT Int. Appl., 259 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9316418	A1	19930819	WO 1993-JP179	19930212
	W: DE, JP, US				
				JP 1992-57269	A 19920212
				JP 1992-116794	A 19920410
				JP 1992-161650	A 19920529
				JP 1992-169880	A 19920605
				JP 1992-194712	A 19920630
				JP 1992-201811	A 19920707
	DE 4390508	T	19940113	DE 1993-4390508	19930212
				JP 1992-57269	A 19920212
				JP 1992-116794	A 19920410
				JP 1992-161650	A 19920529
				JP 1992-169880	A 19920605
				JP 1992-194712	A 19920630
				JP 1992-201811	A 19920707
				WO 1993-JP179	W 19930212
	JP 3620655	B2	20050216	JP 1993-513950	19930212
				JP 1992-57269	A 19920212
				JP 1992-116794	A 19920410
				JP 1992-161650	A 19920529
				JP 1992-169880	A 19920605
				JP 1992-194712	A 19920630
				JP 1992-201811	A 19920707
				WO 1993-JP179	W 19930212
	US 5714289	A	19980203	US 1995-457604	19950601
				JP 1992-57269	A 19920212
				JP 1992-116794	A 19920410
				JP 1992-161650	A 19920529
				JP 1992-169880	A 19920605
				JP 1992-194712	A 19920630
				JP 1992-201811	A 19920707
				US 1993-133087	B1 19931007

L35 ANSWER 29 OF 44 CA COPYRIGHT 2005 ACS on STN

## Full Text

TI Color **electrophotographic** copying method  
 AB In the title method using an app. having an **electrophotog.**  
 photoreceptor, a means to form ≥1 color **toner** images on a  
 transfer layer of the photoreceptor by **electrophotog.**, and a means to  
 heat-transfer the images together with the transfer layer onto an image  
 receptor sheet, the peelable transfer. . .  
 ST **electrophotog** color copier photoreceptor  
 IT **Electrophotographic** photoconductors and photoreceptors  
 (peelable transfer layer for, contg. silicon and/or fluorine-contg.  
 polymer)  
 IT Polycarbonates, uses  
 Polyethers, uses  
 Rubber, butadiene-styrene, uses

# STN Columbus

- RL: USES (Uses)  
(peelable transfer layer from, for **electrophotog.** photoreceptor)
- IT Vinyl acetal polymers  
RL: USES (Uses)  
(butyrals, peelable transfer layer from, for **electrophotog.** photoreceptor)
- IT Siloxanes and Silicones, uses  
RL: USES (Uses)  
(di-Me, **electrophotog.** photoreceptor surface layer contg.)
- IT 25609-89-6, Vinyl acetate-crotonic acid copolymer  
RL: USES (Uses)  
(cellidor BSP-contg., transfer layer for **electrophotog.** photoreceptor contg.)
- IT 9003-09-2, Polyvinylmethylether 9003-20-7, Polyvinyl acetate 9003-55-8  
9004-48-2, Cellidor CP 9011-87-4, Methyl methacrylate-methyl acrylate  
copolymer 9015-12-7, Cellidor BSP 24937-78-8, Ethylene-vinylacetate  
copolymer 25068-26-2, Poly(4-methyl-1-pentene) 25213-29-0,  
Styrene-vinylacetate copolymer 25609-74-9, Poly propylmethacrylate  
27043-73-8 27055-32-9, 1,10-Decanediol-terephthalic acid copolymer  
27516-89-8, 1,6-Hexanediol-succinic acid copolymer 59199-92-7  
66837-11-4, Poly(pentamethylene carbonate) 105726-59-8,  
1,10-Decanediol-isophthalic acid copolymer 156658-58-1  
RL: USES (Uses)  
(peelable transfer layer from, for **electrophotog.** photoreceptor)
- IT 79-41-4DP, Methacrylic acid, ester, fluoroalkyl, polymer with  
methacrylate and **glycidyl** methacrylate 80-62-6DP,  
Methylmethacrylate, polymer with fluoroalkyl methacrylate and  
**glycidyl** methacrylate 106-91-2DP, **Glycidyl**  
methacrylate, polymer with fluoroalkyl methacrylate and methylmethacrylate  
144541-84-4P 150625-01-7P 150625-03-9P 150625-22-2P 150642-22-1P  
150642-24-3P 155292-92-5P 155292-93-6P 155292-94-7P 155292-96-9P  
155292-98-1P 155293-26-8P 156658-62-7P 156658-63-8P  
RL: PREP (Preparation)  
(prepn. of, **electrophotog.** photoreceptor contg.)
- IT 80-62-6DP, Methylmethacrylate, polymer with siloxanes 150624-67-2P  
150624-77-4P 155292-83-4P 155292-84-5P 155292-85-6P 155292-86-7P  
155292-87-8P 155292-88-9P 155292-90-3P  
RL: PREP (Preparation)  
(prepn. of, **electrophotog.** photoreceptor surface contg.)
- IT 2274-11-5D, Ethylene glycol diacrylate, graft copolymer with siloxane and  
ethylene glycol diacrylate 150642-12-9D, graft copolymer with siloxane  
and ethylene glycol diacrylate 150642-14-1 150773-23-2  
150773-24-3 150773-26-5 150773-28-7  
150773-31-2 150773-32-3 150773-37-8  
151038-20-9 151038-21-0 151078-64-7 151115-20-7 156658-64-9  
156658-65-0 156658-66-1 156885-24-4 156885-25-5  
156885-26-6 156885-27-7 156919-89-0 156919-90-3  
157047-74-0  
RL: USES (Uses)  
(resent particles from, for transfer layer for **electrophotog.** photoreceptor)
- IT 9003-55-8  
RL: USES (Uses)  
(rubber, peelable transfer layer from, for **electrophotog.** photoreceptor)
- AN 121:121637 CA
- TI Color **electrophotographic** copying method
- IN Kato, Eiichi; Oosawa, Sadao
- PA Fuji Photo Film Co Ltd, Japan
- SO Jpn. Kokai Tokkyo Koho, 57 pp.

# STN Columbus

CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05181325	A2	19930723	JP 1991-358232	19911227
	DE 4294542	T	19941201	DE 1992-4294542	19921225
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225
	US 6004716	A	19991221	US 1994-256185	19940627
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225

## PATENT FAMILY INFORMATION:

FAN 120:334854

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05181324	A2	19930723	JP 1991-358228	19911227
	JP 3180967	B2	20010703		
	DE 4294542	T	19941201	DE 1992-4294542	19921225
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225
	US 6004716	A	19991221	US 1994-256185	19940627
				JP 1991-358228	A 19911227
				JP 1991-358232	A 19911227
				WO 1992-JP1715	W 19921225

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.20	-20.40

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Apr 8, 2005 (20050408/UP).

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